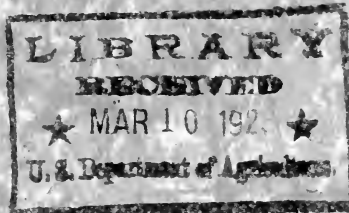


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6213



OLDS & WHIPPLE

INC.

SEEDS AND FERTILIZERS

HARTFORD, CONN.

1928



ORDER SHEETS FOR FARM AND GARDEN SEEDS

FROM

OLDS & WHIPPLE, Inc.

164-6-8 STATE STREET,

HARTFORD, CONN.

Name

P. O. Address

Ship by

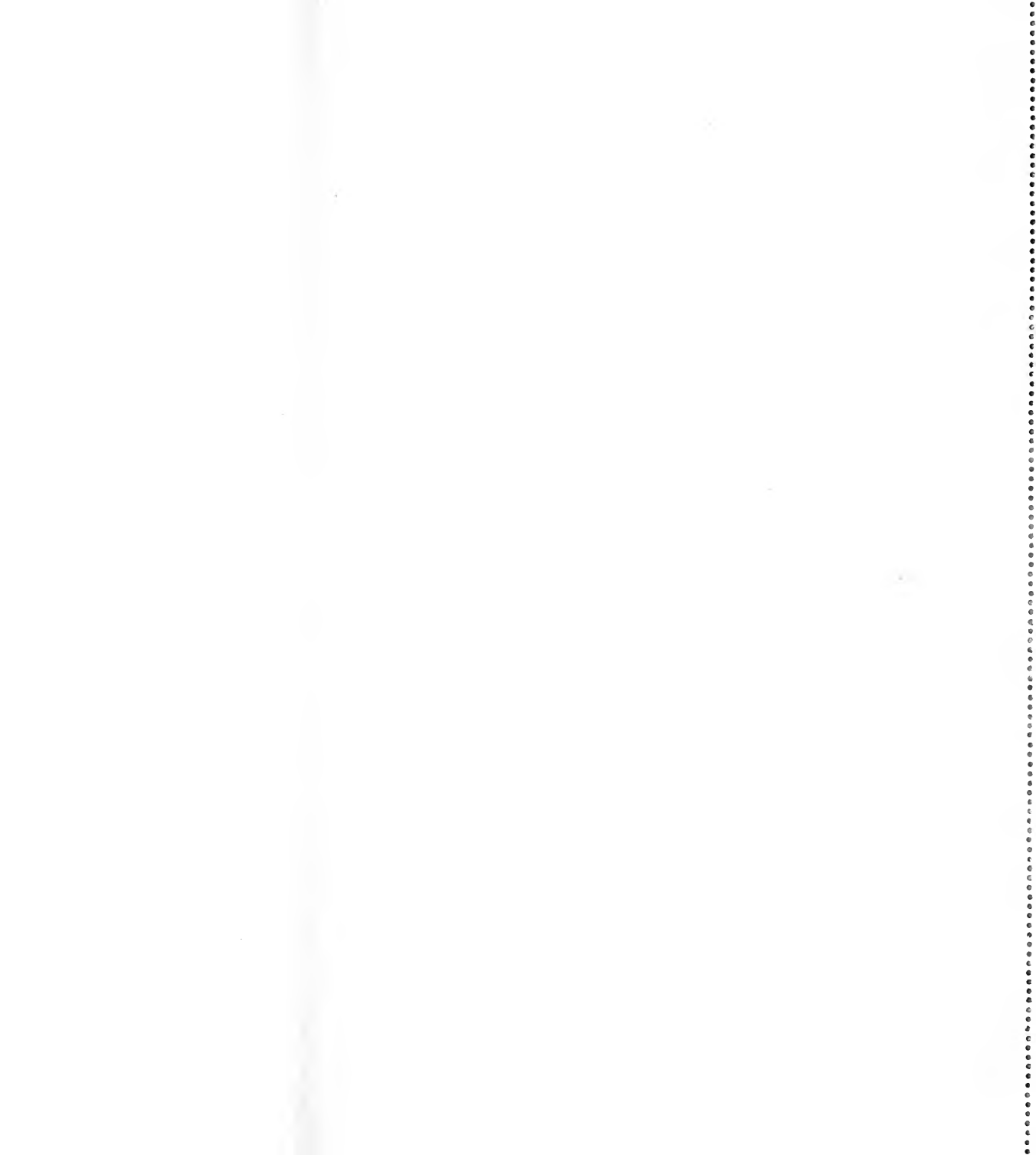
Ship to

Date 192

Quantity.

NAME OF ARTICLES WANTED.

Price.



SEED, FERTILIZER

AND

AGRICULTURAL IMPLEMENT CATALOG

For 1928



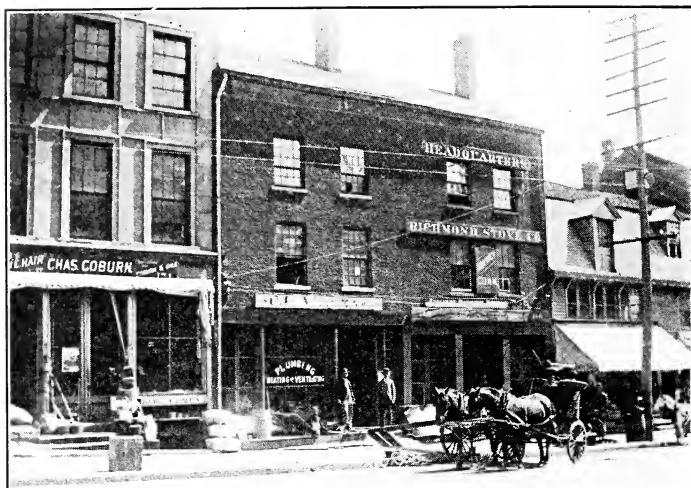
FERTILIZER FACTORY:

Tolland Street, East Hartford, Conn.

MAIN OFFICE AND IMPLEMENT WAREHOUSE:

164-6-8 State St., Hartford, Conn.

OLDS & WHIPPLE, Inc.



This picture shows the old Store occupied by us from Nov. 15, 1877 until it was demolished in 1896 to make room for our new Building.



Our present quarters 164-168 State St. Built in 1896.

1877 - - 1928

OUR 1928 Catalogue goes to our customers with hearty greetings and best wishes for a prosperous year.

We wish to express our appreciation for the generous patronage during the past year of our friends and customers located throughout Southern New England. Our firm has now been in existence more than fifty years, and we have witnessed many changes in agricultural methods during this period. Never was modern agricultural machinery so vital to successful farm operation as it is today, when it is necessary to reduce costs of farm products to compete successfully with other sections of our country.

Realizing this, our customers will find in our warehouse the latest high-class farm implements, both power and horse drawn. Our customers will also find our repair and service department fully stocked with replacement parts for the machines we sell, and this matter of service is a very important matter to the users of farm machinery. As we stated a year ago, we realize that the measure of our service is the measure of our value to this community.

Olds & Whipple, Inc.

List of Fertilizers and Raw Materials for 1928

O. & W.'s Special Fertilizers

O. & W. Complete Tobacco Fertilizer	O. & W. High Grade Potato and Vegetable Fertilizer
O. & W. Blue Label Tobacco Fertilizer	O. & W. Complete Grass Fertilizer
O. & W. High Grade Tobacco Starter	O. & W. High Grade Tobacco Starter and Potash Compound
O. & W. Complete Market Garden Fertilizer	O. & W. Lawn Fertilizer
O. & W. Grain and General Crop Fertilizer	

FERTILIZING MATERIALS

Swift Sure Phosphate.	Super Phosphate. (acid phosphate)
Swift Sure Bone Meal.	Sulphate of Ammonia.
High Grade C. S. Meal guaranteed analysis.	Nitrate of Soda.
Castor Pomace guaranteed analysis.	Sheep Manure.
Tobacco stems in bales.	Dry Ground Fish.
Lime for Agricultural use.	Tankage.
Fine ground Nova Scotia Plaster.	Steamed Bone.
High Grade Muriate Potash.	Precipitated Bone Phosphate.
High Grade Sulphate Potash.	Poultry Manure.

We offer our usual list of Special Formulas for all crops. We would call especial attention to our O & W High Grade Starter and Potash Compound to be used in conjunction with Castor Pomace or Cotton Seed Meal and when so used making a complete tobacco fertilizer. This combination has been extensively used during the past few years with most satisfactory results.

We again urge our customers to order their fertilizer at once and allow us to deliver same at an early date and thus avoid the mad scramble that always comes late in the season. There is no good reason for delay.

Our Special Mixtures for all Crops

The following pages give you a list of the special fertilizers which we manufacture at our own factory.

These special mixtures are from tested formulae, proved out by practical growing tests. They are finely ground, and mechanically, in such condition, as to render them readily available to the growing crops.

Their use will repay you. They produce the kind of crops that pay. Used and endorsed by best growers.

Fertilizing Cigar Leaf Tobacco

for Bigger Yields and Better Burning Quality

A good cigar depends upon its burning quality and flavor for its reputation.

Leaf tobacco for making a good cigar must be of the best quality, must hold fire well, not burn too fast or too slowly. It must not coal on the cigar and it must leave a clear white or light gray ash, not a muddy ash.

Cigar smokers everywhere are complaining about the quality of the cigar being made today. Manufacturers cannot make good cigars unless they get good tobacco, and that is where the grower comes in.

Leaf-Wise

No matter how old a man is, if he is wise, he can still acquire more wisdom. No matter how old a grower is, he can still acquire more wisdom about a tobacco leaf.

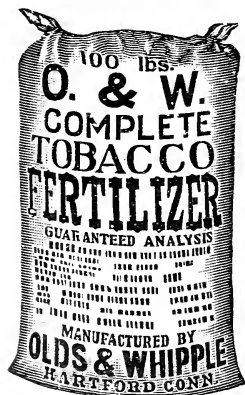
The tobacco plant, perhaps more than any other plant, can be and is influenced for better or worse by proper or improper fertilization. In applying fertilizer, the grower must have two essential things in mind: 1, to preserve the productiveness of his soil; and 2, to produce leaf that has the most desirable qualities, namely, BURN — GRAIN — TEXTURE — and COLOR. This is a large order, but it can be successfully met by growers carefully studying the right fertilizers to use.

Fertilizers

The production of a good tobacco crop requires a large amount of plant food, especially nitrogen and potash.

Good cigar tobacco can be produced by the use of fertilizers without manure. In some tobacco areas manure is used. Experiments as conducted at the Pennsylvania Experiment Station show, however, that there is a great advantage and more profit by using complete fertilizer in addition to manure. Fertilizer improves both the yield and the quality. These points have been brought out in a very convincing way by a test in Lancaster County, Pa., from 1916 to 1921. Ten tons of manure produced 1,770 lbs. of tobacco, but with 1,750 lbs. of complete fertilizer, the yield was 2,270 lbs. of tobacco of much better quality and burn.

Potash not only greatly increases the yield, but it also has a marked effect on quality. Every complete fertilizer, whether used alone or with manure, should contain plenty of potash to improve the quality. Better quality and better yields must go together if the tobacco grower is to make the best profit.



O. & W. Complete Tobacco Fertilizer

Thousands of tons of this formula are used up and down the Connecticut Valley, proved to be the best by years of experience. While we make many special formulae to suit the ideas of our customers, O. & W. COMPLETE leads them all in popularity. This formula is the result of years of experimenting on our own farms and is endorsed by buyers of the leaf which is the strongest kind of recommendation.

GUARANTEED ANALYSIS	{ 5 to 6% Ammonia.
	{ 3 to 4% Available Phosphoric Acid.
	{ 5 to 6% Actual Potash.

Our Blue Label Brand Tobacco Fertilizer

This fertilizer carries 1000 lbs. of C. S. Meal in every ton, put up for the grower who desires a large amount of meal under his tobacco crop. The phosphoric acid and potash are derived from the same high grade sources as our Complete Tobacco Fertilizer.

GUARANTEED ANALYSIS	{ 6 to 7% Ammonia.
	{ 3 to 4% Available Phosphoric Acid.
	{ 6 to 7% Actual Potash.

O. & W. High-Grade Tobacco Starter

This high grade starter has been used with conspicuous success by some of our best growers in the valley. We recommend that it be applied after the first time hoeing. At that critical stage of growth an abundant supply of quickly available ammonia enables the plant to get a vigorous start, overcome and grow away from any unfavorable condition that may exist.

Experience has taught us that the crop that grows quickly, vigorously and does not stop until it reaches maturity produces the best goods.

Apply about 500 lbs. per acre.

GUARANTEED ANALYSIS { 10 to 11% Ammonia.
3 to 4% Available Phosphoric Acid.

O. & W. High Grade Starter and Potash Compound

This formula with 5 per cent quickly soluble Ammonia and 15 per cent actual Potash should be used with C. S. Meal or Castor Pomace in growing the tobacco crop and when so used makes a complete fertilizer. The Ammonia of C. S. Meal or Pomace is slow acting and on most lands a more quickly soluble form of Ammonia is needed to start the crop. We recommend using 1000 to 1500 lbs. per acre with a ton of C. S. Meal or Pomace.

GUARANTEED ANALYSIS { 5 to 6% Ammonia.
4 to 5% Available Phosphoric Acid.
15 to 16% Actual Potash.

Fertility in Truck Farming

Success in commercial vegetable growing consists largely in maintaining the full productive power of the land at the lowest cost and with the least interruption of crop continuity. The increasing scarcity of stable manure and its nearly prohibitive cost have obliged most commercial growers to turn to commercial fertilizers for plant food, and to cover crops for their organic matter. Even where manure is available in quantity, growers are using considerable amounts of fertilizer.

O. & W. Complete Market Garden Fertilizer

This is one of our high grade special mixtures for use on Corn, Potato, Onion Crops, Market Garden and general purpose fertilizer.

The sources of plant food are such as are exceedingly available to the plant and best suited to promoting rapid and vigorous growth. Tested at our own farms we are able to speak authoritatively as to its merits. All growers will be repaid by using this special mixture on their Crop.

Our soils are well adapted to the culture of these Crops and to make them profitable as well, is an easy matter if the culture is supplemented and promoted by the use of our special fertilizer.

GUARANTEED ANALYSIS { 4 to 5% Ammonia.
8 to 9% Available Phosphoric Acid.
4 to 5% Actual Potash.

O. & W. Grain and General Crop Fertilizer

This Special Fertilizer is well balanced for general crops. It is used extensively in the onion growing section of Massachusetts and produces fine crops.

Moderate in price, it has a well earned place in our list of formulas.

GUARANTEED ANALYSIS { 2 to 3% Ammonia.
9 to 10% Available Phosphoric Acid.
3 to 4% Actual Potash.

O. & W. Grass Fertilizer

A complete fertilizer with all the essential elements for rapid and luxurious growth, carrying both soluble salts and organic material, it is suitable both for top dressing or permanent seeding down mixture.

GUARANTEED ANALYSIS { 6 to 7% Ammonia
6 to 7% Avail. Phos. Acid.
4 to 5% Actual Potash.

Top-Dress Annually After First Year

After the first year, clover largely gives way to the grasses which, unlike clover, can get no nitrogen from the air and which, furthermore, are one year further removed from the seeding-down application. Whether the grasses persist for several years in a clean, heavy-yielding stand or very soon become weedy and decline in yield is absolutely a matter of fertility. Practically every experiment station in the eastern half of the country has proven that point. Fertilize the grasses and they live, yield well, and show a profit; starve them and they run out, get weedy and show a loss.

An application of 300 to 600 pounds per acre of special top-dressing fertilizer in early spring as soon as grass starts vigorous growth will supply the right kinds and amounts of plant foods at the right time for maximum returns.

O. & W. High Grade Potato and Vegetable Fertilizer

This is a concentrated mixture running high in analysis in every ingredient, and as a formula, is extensively used in the potato growing sections of Maine. To produce large crops of potatoes you must feed heavily of Potash. This was thoroughly proven during the war, as even when Potash was extremely high and scarce some of the Maine potato growers paid the price for this ingredient and were well repaid by increased crop.

GUARANTEED ANALYSIS { 5 to 6% Ammonia.
8 to 9% Available Phosphoric Acid.
7 to 8% Potash.

What Plant Food Does for Potatoes

Nitrogen in a potato fertilizer produces leaf and stem growth. A portion of it should be quickly available. The remainder should come from more slowly available sources, so that the crop will be fully fed throughout the season.

Phosphoric acid produces a vigorous root system, promotes maturity, and helps to produce high quality.

Potash is the plant food most closely associated with starch formation in the tuber, — hence it has a decided influence on quality. It helps also to grow strong disease-resistant vines.

DESCRIPTIVE CATALOGUE and PRICE LIST
OF
Garden and Farm Seeds,
Agricultural Implements and
Fertilizers
for 1928

Important Notice—Free Delivery of Seeds

We Deliver, Transportation Paid in the U. S. and Possessions, Vegetable Seeds by the packet, ounce, quarter-pound, pound.

On larger quantities purchaser pays transportation. We also deliver, transportation paid, all Lawn Grass Seed mixtures in any quantity.

In making this Free Delivery offer we reserve the right to ship goods either by Parcel Post, Express or Freight.

We reserve the right to advance prices without notice should current conditions require it.

REMITTANCES

May be made by Express Money Order, P. O. Money Order or Check.

NOTE:—If cash or stamps are sent by mail, REGISTER THE LETTER, otherwise it travels at owner's risk.

C. O. D. ORDERS

If goods are wanted C. O. D., 25 per cent of the amount must accompany the order. Charges for returning the money will be collected on delivery.

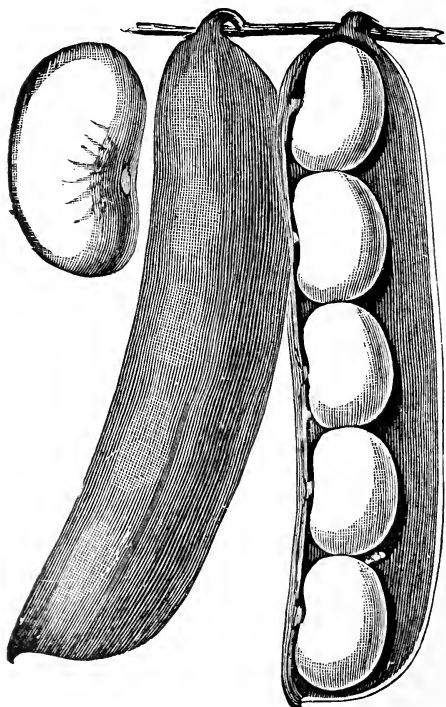
In accordance with the universal custom of the Seed Trade, Olds & Whipple, Inc. give no warranty, express or implied, as to description, quality, productiveness, or any other matter, of any Seeds they send out, and they will not be in any way responsible for the crop.

ASPARAGUS

An Asparagus bed may be made from one or two year old roots, planted in fall or spring. Plant the roots in rows four feet apart, leaving about twelve inches between plants in the row. Should be planted in trenches and gradually filled in as plants grow. Seeds may be sown in April in drills one foot apart and one inch deep. One ounce of seed will sow sixty feet of drill.

	Per Pkt.	Per ¼ lb.	Per lb.
The Palmetto.—Superior variety, extra large,	\$0.10	\$0.25	\$0.75
Conover's Colossal.—Large and hardy,	.10	.25	.75
Donald's Elmira Roots.—Fine, large, 2 year old and fresh dug.		Per 100,	1.25
Giant Argenteuil Roots—Fresh dug roots.		Per 100,	1.25
Washington—Large roots.		Per 100,	2.00
Mary Washington		Per 100,	2.00

BEANS—Dwarf or Bush



To produce a regular succession of crops through the season, plant every two weeks, from about beginning of May to end of summer. Plant in rows 18 inches apart, two inches deep; cultivate only when soil is dry, as the scattering of earth on vines will cause them to rust. One quart will plant 100 feet of drill and one and one-half bushels for one acre.

BEANS

Owing to extremely unfavorable weather conditions, the bean crop is very short, some varieties were almost a total crop failure. Stocks are scarce and prices high.

Burpee's Bush Lima.		Per lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Burpee's Bush Lima.—A true bush form and immense cropper,		\$0.40	\$0.30	\$0.27
Fordhook Bush Lima.—		.45	40	.38

	Per lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Improved Rust Proof, Golden Wax.—Early, long, round, stringless pods,	\$0.35	\$0.30	\$0.26
Early Golden Eyed Wax.—Hardy and prolific, flat pods, early, . . . . .	.35	.30	.26
Black Wax, Pencil Pod.—Very early, round thick pods, .	.35	.30	.26
Wardwell's Kidney Wax.—Early, flat long wax pods, very fine, . . . . .	.35	.30	.26
Early Valentine.—Improved, true round green pod, .	.35	.30	.26
Bountiful.—Flat Green pods, stringless, . . . . .	.40	.35	.30
Burpee's Stringless.—Round Green pod, early, . . . . .	.35	.30	.26
Horticultural Dwarf.—Green pod, a superior shell bean, medium early, . . . . .	.35	.30	.26
Low's Champion.—Large green flat stringless pods, .	.35	.30	.26
White Kidney.—An excellent shell bean and for baking, green pod, . . . . .	.30	.25	.22
White Marrow.—A fine winter bean, . . . . .	.30	.25	.22
Boston Favorite.—A large late dwarf horticultural, .	.40	.35	.26
Red Kidney.—An excellent shell bean, similar to White Kidney, . . . . .	.35	.30	.25

BEANS—Pole

Plant in hills three to four feet apart, putting four or five beans in a hill, and leaving space in the center for the pole. One quart of limas will plant 100 hills. One quart of the smaller seeded sorts will plant about 200 hills.

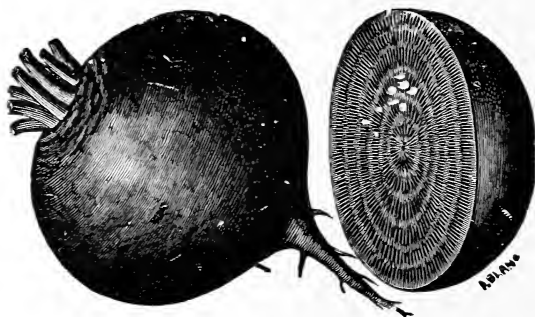
	Per lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Extra Early Jersey Lima.—An early and large variety, .	\$0.40	\$0.35	\$0.26
Lima, Large White.—An old and choice variety, . . . . .	.40	.35	.26
Lima, King of the Garden.—Large and extremely productive, . . . . .	.40	.35	.26
Horticultural Cranberry.—Excellent quality, . . . . .	.35	.30	.26
Early Golden Cluster Wax Pole.—Early golden pods, large and tender, . . . . .	.40	.35	.28
Kentucky Wonder.—Green pod, very prolific, . . . . .	.35	.30	.27

BEETS—Table Varieties

Sow from April to beginning of July, in drills about one foot apart, covering seeds about one inch. Thin the young plants when suitable size for greens to six or eight inches apart. One ounce sows 50 feet of drill, 5 to 6 pounds to one acre.

	Per pkt.	Per oz.	Per lb.
Early Wonder.—Deep red, round, very popular with market gardeners,	\$0.10	\$0.15	\$1.00
Crosby's Egyptian.—Early smooth and fine quality, . . . . .	.10	.15	.90
Edman's Extra Early.—One of the best, . . . . .	.10	.15	.90

	Per pkt.	Per oz.	Per lb.
Early Eclipse. —Very early, dark red color,	\$0.10	\$0.15	\$0.90
Early Egyptian. —Good color, a smooth turnip beet, . . . . .	.10	.15	.90
Early Bassano. —Earliest of all, flesh nearly white, . . . . .	.10	.15	.90
Detroit Dark Red. —Smooth, bright red, good keeper, . . . . .	.10	.15	.90



Dewing's Early Blood Turnip.

Bastian's Early Blood Turnip. —A quick large growing sort, of good color, . . . . .	.10	.15	.90
Dewing's Early Blood Turnip. —A standard variety of excellent quality, . . . . .	.10	.15	.90
Long Smooth Blood. —An excellent late variety for winter use, . . . . .	.10	.15	.90
Swiss Chard. —Fine for greens, cultivated solely for leaves, . . . . .	.10	.15	1.00

MANGOLD WURZEL

Sow in May or June in rows, 18 inches to 2 feet apart, and thin to 8 inches in the row. The value of these for stock feeding cannot be over estimated. Sow 6 to 8 pounds to one acre.

	Per oz.	Per lb.
Carter's Mammoth Long Red. —A heavy cropper, one of the best,	\$0.10	\$0.60
Norbiton Giant Long Red. —Very productive, . . . . .	.10	.60
Yellow Globe. —Large globular formed roots, good for shallow soils, . . . . .	.10	.60
Giant Half Sugar —Rose shape and similar to Norbiton Giant, . . . . .	.10	.60
Golden Tankard. —A half-long variety of bright yellow color, . . . . .	.10	.60
White Sugar, Lane's Improved. —A well known variety, . . . . .	.10	.60

Mangold seed in 5 pound lots, 30 cents a pound.

BROCCOLI

A vegetable resembling Cauliflower but much hardier. Requires the same general culture as cabbage. One ounce of seed produces about 1,500 plants.

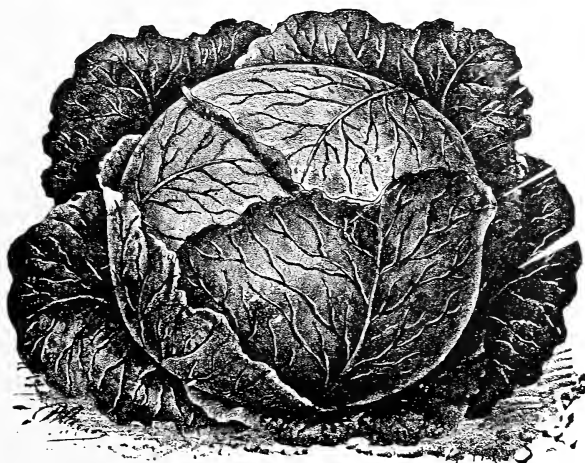
	Per pkt.	Per oz.
Purple Cape. —Medium size heads, hardy,	\$0.20	\$0.65
White Cape. —Like Purple Cape, but of cream white color. . . . .	.20	.65
Early Green Italian —or Calabrese, . . . . .	.30	1.25

BRUSSELS SPROUTS

A species of cabbage family and cultivated in about same manner. One ounce of seed will produce about 1,200 plants.

	Per pkt.	Per oz.
O. & W.'S Best	\$0.10	\$0.25

CABBAGE—Early



All Seasons.

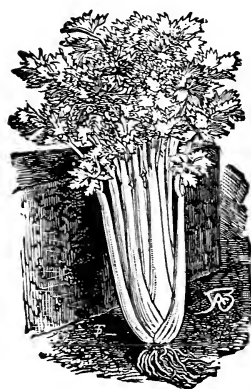
All the Cabbage family require rich, deep, well-drained soil. For the early kinds, plant in rows 30 inches apart and 16 inches between the plants. For the late varieties, three feet between the rows and two feet between the plants. For very early use, sow in January or February in hot-beds. Set out when plants are strong enough into other hot-beds or set in cold frames in March. Transplant when danger from frost is past to open ground. The late, or winter crop seed can be sown in May and the plants set out when large enough.

To destroy the green worm that attacks the cabbage plant, use a solution of one ounce of saltpetre in three gallons of water. One ounce of seed will produce about 3,000 plants, one-quarter pound for one acre.

	Per pkt.	Per oz.	Per lb.
Golden Acre.—Extra early Copenhagen type,	\$0.20	\$0.60	\$7.00
Copenhagen Market.—Extra early round hard head, . . . . .	.10	.40	4.00
Early Jersey Wakefield Extra.—A fine, very early medium sized market favorite, . . . . .	.10	.30	3.25
Early Summer.—A superior, second early, heads large and solid, . . . . .	.10	.30	3.25
Early Flat Dutch.—A fine early variety for family use, . . . . .	.10	.30	3.25
All Seasons.—Medium early, very large and sure header, . . . . .	.10	.30	3.25

CABBAGE—Late Varieties

	Per pkt.	Per oz.	Per lb.
O. & W. Premium Flat Dutch. —An extra fine selection of the large late Flat Dutch,	\$0.10	\$0.30	\$3.00
Improved American Drumhead Savoy. —Large, fine quality, excellent winter cabbage, . . . . .	.10	.35	3.25
Stone Mason Drumhead. —A large round solid variety, . . . . .	.10	.30	3.00
Red Dutch Drumhead. —Fine solid dark red heads, . . . . .	.10	.30	3.25
Hollander, or Danish. —A superior winter variety, heads round, very hard, fine and tender, . . . . .	.10	.30	3.25
Sure Head. —Large growing, fine heading, solid and large, . . . . .	.10	.30	3.25
Chinese. —Select, . . . . .	.10	.35	4.00



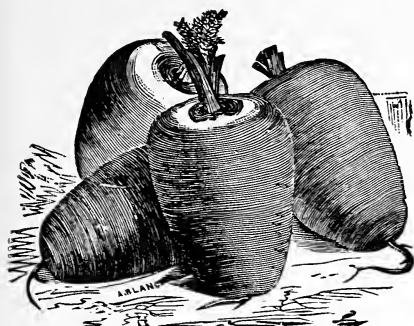
Paris Golden.

CELERY

Sow seed about the first of April in hot-bed or cold frame. Transplant four inches apart, when three inches high in rich soil; water and protect until well rooted, then transplant into rows 5 or 6 feet apart either on surface or in trenches 8 inches deep. Set the plants 10 or 12 inches apart. To blanch draw earth around the plants from time to time.

One ounce of seed will give about 4,000 plants.

	Per pkt.	Per oz.	Per lb.
Paris Golden, Self Blanching, (French.) —An early golden variety, very popular,	\$0.20	\$0.75	\$11.50
Boston Market. —One of the best varieties in cultivation, . . . . .	.10	.30	3.00
Celeriac. —Turnip rooted, used for salads and soups, . . . . .	.10	.25	3.00
White Plume. —Easily bleached, usually solid and of a pleasing nutty flavor, . . . . .	.10	.30	3.00
Golden Plume. —Popular Golden self-blanching, . . . . .	.40	1.75	20.00
Winter Queen. —One of the best winter varieties, . . . . .	.10	.30	3.00
Giant Pascal. —Second early, crisp, fine quality, . . . . .	.10	.25	2.50
Easy Blanching. —White, solid, easily bleached, . . . . .	.20	.45	5.00



CARROT

Carrots thrive best in rather light loam; soil should be well cultivated and well fertilized. Plant in rows 14 inches apart, and thin plants to 3 to 5 inches in the rows. Plant from the middle of April to the middle of May.

One ounce will sow 100 feet of drill. 3 to 4 pounds to one acre.

	Per pkt.	Per oz.	Per lb.
Geurande, or New Ox Heart. —An intermediate variety, .	\$0.10	\$0.20	\$1.25
Danvers Half Long. —A most desirable variety, great keeper, .	.10	.20	1.25
Improved Long Orange. —A large long rooted variety, for stock purposes, .	.10	.20	1.00
White Belgian. —Large, white, productive, for stock, .	.10	.20	1.00
Early Scarlet Horn. —An early short variety for forcing, excellent for table, color deep orange, .	.10	.20	1.50
Early Half Long Scarlet. —Stump-rooted, coreless, red color, .	.10	.20	1.00
Chantenay. —A half-long, one of the finest for table use, .	.10	.20	1.25
Hutchinson. —Large stump rooted, .	.10	.25	3.00

CAULIFLOWER

Is one of the most delicious varieties of the Cabbage family. Requires a rich deep soil, a low moist situation being desirable. Plants should be set in rows about 2 feet apart and 18 inches between the plants.

One ounce will sow a bed of 40 square feet and produce about 2,000 plants.

	Per pkt.	Per ¼ oz.	Per oz.
Henderson's Snowball. —This ranks extremely high among the early varieties, it is a reliable header of good size and of rich white color, .	\$0.20	\$0.75	\$2.00
Erfurt Early Dwarf. —A good variety, .	.20	.75	2.00
Early Paris. —A standard early variety, .	.10	.50	1.50

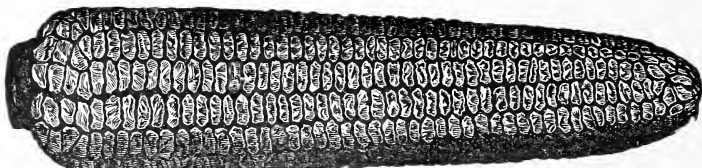
CORN—Sweet

Requires a rich warm soil. For early varieties plant when ground has become well warmed; successive plantings may be continued until July. Plant in hills from 3 to 3½ feet apart, according to the height of variety.

One quart will plant 200 hills; 8 quarts for one acre in hills.

	Per lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Columbia. —Earliest white variety, .	\$0.35	\$0.25	\$0.22
Extra Early Cory. —One of the leading extra early market varieties, .	.35	.25	.22
White Cob Cory. —Similar to Early Cory; less hardy, very satisfactory, .	.35	.25	.22
New Champion. —Fine early quality with large ears, .	.35	.25	.22
Early Minnesota. —One of the second early sorts, ears of good size, .	.35	.25	.22

	Per lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Crosby's Early. —An old favorite, early and of excellent quality,	\$0.35	\$0.28	\$0.25
Country Gentleman. —A rich, sweet, deep kerneled variety, with small cob, . . . . .	.35	.28	.25
Whipple's White. —Early and good quality, . . . . .	.35	.24	.21
Whipple's Yellow. —Early as golden bantam but much larger, fine quality, . . . . .	.35	.28	.25



Early Maine.

Long Island Beauty. —Large late and one of the best, . . . . .	.35	.28	.25
Evergreen. —A standard late variety, . . . . .	.35	.25	.22
Mammoth Sugar. —Extra large sweet variety, of good quality, . . . . .	.35	.28	.25
Black Mexican. —An early, tender corn of fine flavor, . . . . .	.35	.28	.25
Golden Bantam. —A yellow sweet corn, extra early and extra hardy, very tender and sweet, . . . . .	.35	.28	.25
Golden Giant. —Cross between Golden Bantam and Howling Mob, . . . . .	.35	.25	.22
Howling Mob. —Excellent quality early large ears, . . . . .	.35	.22	.19

CORN—Field

(Prices subject to market changes.)

Central Pennsylvania. —A popular ensilage variety,	} at market prices.
Eureka. —A well known ensilage variety of White Corn. Very leafy, of extra large growth, and we believe will produce more tons of silage than any other variety. For Ensilage only,	
Leaming's Early Dent. —A very popular Dent Corn, grown for both grain and Ensilage. This variety will mature in this latitude,	
Mastodon Early. —Large, free growing, very productive,	
Early Yellow Dent. —Connecticut grown, a dent corn that will mature in this latitude,	
Longfellow. —A yellow flint corn, a well and favorably known variety,	
8 Row Yellow Flint. —A blue ribbon corn, grown seed,	

Use O. & W. Complete Market Garden Fertilizer for Corn

CRESS

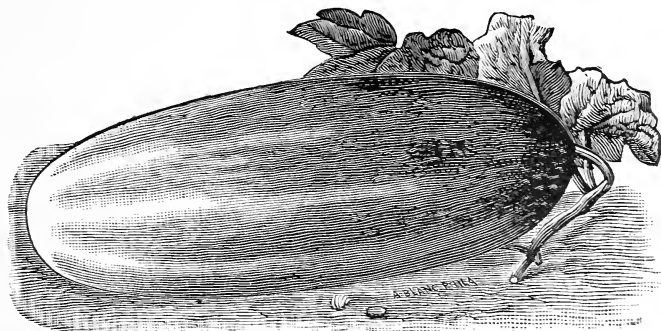
To be planted in drills and sown quite thickly, on good rich ground, in early spring.

One ounce of seed will plant 100 feet of drill.	Per pkt.	Per oz.	Per lb.
Curled. —	\$0.10	\$0.15	\$0.75

CUCUMBER

First planting should be made in May when ground is dry and warm, in hills about 4 feet apart; thin out to 3 to 4 plants to the hill when established. For pickles plant during the last two weeks in June.

One ounce will plant 50 hills; two pounds for one acre.



Improved Early White Spine.

	Per pkt.	Per oz.	Per lb.
Early Fortune. —Excellent for slicing or Pickling, .	\$0.10	\$0.15	\$1.25
Early Russian. —The earliest variety, about 4 inches long. .	.10	.15	1.25
Early Cluster. —Bears in clusters, early and productive, .	.10	.15	1.25
Davis Perfect. —Dark green, good length, popular. .	.10	.15	1.50
Snow Pickling. —One of the best pickling, .	.10	.15	1.25
Improved Early White Spine. —A standard variety of uniform good size and color, .	.10	.15	1.25
Green Prolific. —The very best pickling sort, .	.10	.15	1.25
Boston Pickling. —Produces an abundant crop of dark green color, .	.10	.15	1.25
Improved Long Green. —A large and late variety, .	.10	.15	1.50

DANDELION

Sow in May in drills 12 inches apart, covering seeds about one-half inch deep. Cultivate to keep down weeds during summer and the following spring leaves will be suitable for cutting. Must be covered in winter to protect from frost.

One ounce for 100 feet of drill. One pound for one acre.

	Per pkt.	Per oz.	Per lb.
Improved Thick-Leaved. —Standard sort, very productive, .	\$0.25	\$0.85	\$10.25
French Garden.— . . . . .	.10	.35	3.25

DILL

	Per pkt.	Per oz.	Per lb.
Mammoth or Long Island. —	\$0.10	\$0.15	\$1.00

EGG PLANT

Plant the seed in hot beds early in spring. Transplant when two inches high into another bed, or small pots. Plant in garden when weather is settled and warm. Should be placed about 3 feet apart, and well watered for 2 or 3 days, until they show signs of being rooted.

	Per pkt.	Per oz.
New York Improved Purple. —The leading market variety, excellent and very productive. .	\$0.15	\$0.65
Black Beauty. —Early, fruit black, round and solid, .	.15	.65

ENDIVE

For early use, sow as soon as ground can be worked in spring in drills fifteen inches apart; thin plants to six inches in the row. Any ordinary soil will do, but a moist place is preferred. To blanch the leaves, gather them together when dry and tie with matting or cover with ordinary flower pots inverted.

One ounce will produce about 3000 plants.

	Per pkt.	Per oz.	Per lb.
Green Curled. —A standard sort,	\$0.10	\$0.20	\$1.50
Moss Curled. —Very ornamental, . . . . .	.10	.20	1.50
Batavia Escarolle.— . . . . .	.10	.20	1.25

KALE or German Greens

Plant the larger varieties in hills two by three feet apart and thin to one plant to the hill. Requires deep, rich soil. Set out plants in June and treat in same manner as for cabbage.

One ounce will produce 2,000 plants.

	Per pkt.	Per oz.	Per lb.
Green Curled Scotch. —Leaves of bright green, very tender and closely curled,	\$0.10	\$0.20	\$1.25
German Greens. —To be sown in fall for spring use, . . . . .	.10	.20	1.25

KOHL RABI

An intermediate vegetable between the cabbage and turnip. Prepare as for cabbage. Sow in April in rows 18 inches apart and thin out to 8 inches apart.

One ounce gives 3,000 plants.

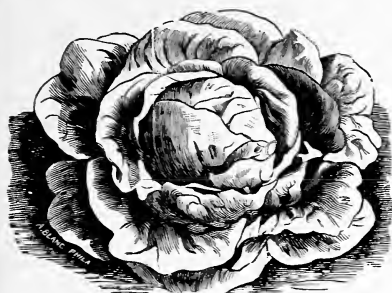
	Per. pkt.	Per. oz.	Per. lb.
Early White Vienna. —A standard early,	\$0.10	\$0.25	\$2.50
Early Purple Vienna. —Very large and productive, . . . . .	.10	.25	2.50

LEEK

Sow the seeds in April and transplant in July to rows 15 inches apart and 8 inches between plants.

One ounce will grow 1,000 plants.

	Per pkt.	Per oz.	Per lb.
American Flag. —A hardy and profitable sort, excellent for winter use,	\$0.10	\$0.20	\$1.75



Boston Market.

LETTUCE

Lettuce needs a rich and moist soil, should be sown in rows about 12 inches apart and the plants thinned to 10 inches apart for the heading varieties. When not grown for head they may be sown broadcast. The more rapid the growth, the better the quality.

One ounce for 3,000 plants.

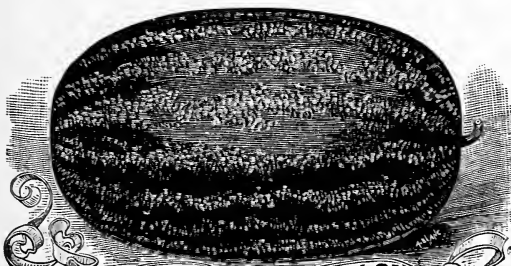
	Per pkt.	Per oz.	Per lb.
May King. —Medium size, early, good heading, a popular sort,	\$0.10	\$0.25	\$1.75
Early Curled Silesia. —Sweet, early, good variety . . . . .	.10	.25	1.75
Early Simpson. —Early, compact mass of tender leaves, . . . . .	.10	.20	1.60
Black-Seeded Simpson. —Large light-colored head variety, . . . . .	.10	.25	1.75
Boston Market. —Early, small heads, very hardy, . . . . .	.10	.25	1.75
Hanson. —Large, solid, crisp head, one of the best outdoor sorts, . . . . .	.10	.20	1.60
True Iceberg. —Light green heads, . . . . .	.10	.30	2.00
Tennis-Ball Black Seeded. —Excellent for early large heads, . . . . .	.10	.25	1.75
Tomhannock. —One of the best varieties for broadcast cultivation, leaves slightly bronzed, . . . . .	.10	.25	1.75
Crisp as Ice. (Bronzed) a fine bronze leaf lettuce, . . . . .	.10	.30	2.00
New York. —Head lettuce, commonly called Iceberg . . . . .	.10	.30	2.00
Big Boston. —A head lettuce, for forcing or open culture, . . . . .	.10	.25	1.75
Cos or Romaine . . . . .	.10	.25	1.75

MUSTARD

Sow from April to June in drills one foot apart and cover seed lightly. Used principally for salads.

	Per oz.	Per ¼ lb.	Per lb.
White or English. —For salad or medicinal purposes,	\$0.10	\$0.20	\$0.45
Brown. —More pungent than white, . . . . .	.10	.25	.75

MELON—Water

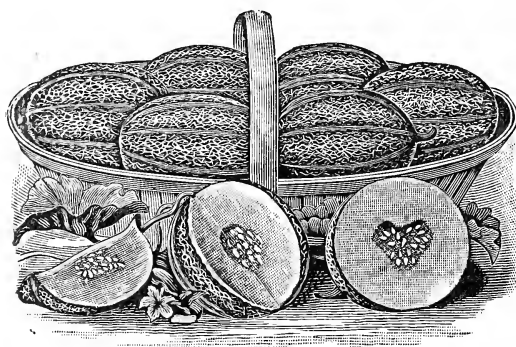


Ice Cream.

A warm light sandy loam preferred. Being tender should not be planted before middle of May. Plant in hills 5 to 6 feet apart each way for the musk varieties and 8 feet apart for the water. Cover seeds about one-half inch deep and when well started thin out to 3 plants in a hill. One ounce will plant about 15 hills; 4 pounds to the acre.

	Per oz. pkt.	Per lb.
Cuban Queen. —Round, large, red meated and sweet,	\$0.15	\$1.00
Gray Monarch. —Very large, of exceptional fine quality, long, red color and very sweet, . . . . .	.15	1.00
Cole's Early. —Round, striped, delicious flavor, red flesh, good size, . . . . .	.15	1.00

	Per oz. pkt.	Per lb.
Kleckley's Sweet. —Oblong in form, dark green, thin rimmed, flesh bright scarlet, white seed, sweetest of all,	\$0.15	\$1.00
Mountain Sweet. —An old standard variety, early and solid, . . . . .	.15	1.00
Phinney's Early. —Early, reliable, red fleshed, productive, . . . . .	.15	1.00
Ice Cream. —White seeds, medium size, solid fine flavor, one of the most popular varieties grown, . . . . .	.15	1.00
Kolb's Gem. —Flesh bright red, almost round, grows large, very choice, . . . . .	.15	1.00
Citron for Preserves.— . . . . .	.15	1.00



Rocky Ford Melon.

MELON—Musk

One ounce will plant 80 hills; 2 to 3 pounds for one acre.

	Per pkt.	Per oz.	Per lb.
Hackensack. —Large, productive and good flavor, green fleshed	\$0.10	\$0.15	\$1.25
Rocky Ford. —A very popular variety, flesh light green, sweet and delicate flavor, . . . . .	.10	.15	1.25
Bender's Surprise —Large, slightly oval, good quality, pink flesh, . . . . .	.10	.20	2.00
Hearts of Gold —Round medium early, pink flesh, . . . . .	.10	.15	1.25
Miller's Cream. —Thick meated and salmon colored flesh, delicious, . . . . .	.10	.20	1.35
Paul Rose. —An extra quality, salmon flesh, medium size, . . . . .	.10	.15	1.25
Emerald Gem. —Small, but prolific, yellow meated, superior quality, . . . . .	.10	.15	1.25
"Lake Champlain." —Improved Emerald Gem, . . . . .	.10	.20	2.00
Osage, Salmon Fleshed. —A deliciously sweet melon of fine flavor, . . . . .	.10	.15	1.25

NASTURTIIUM

Cultivated for both use and ornament. Young seeds may be used as capers and leaves for salad purposes. The beautiful flowers, blooming freely all summer add a charm to the garden and lawn. Plant in May.

	Per pkt.	Per oz.	Per ¼ lb.
Tall. —An ornamental climber, . . . . .	.10	\$0.15	\$0.40
Dwarf. —Fine for borders and beds, . . . . .	.10	.15	.40

OKRA

Plant in rows 2 feet apart, thinning plants to 1 foot apart in the row.

	Per pkt.	Per oz.	Per lb.
Dwarf Green. —Early and productive.	\$0.10	\$0.15	\$0.75

ONION

(Strictly new seed—Prices subject to change.)



Southport Red Globe.

O. & W. Complete Market Garden Fertilizer.

A fertilizer that will produce remarkable crops. Used by many of the best growers in Massachusetts and Connecticut.

The onion thrives best in deep, loamy soil, well fertilized. Sow the seeds thinly in drills 1 foot apart. Cover seeds about $\frac{1}{4}$ inch, roll and tread soil down solidly. When 3 inches high, thin out to 3 inches apart. Cultivate well and keep out weeds.

One ounce seed will sow 100 feet of drill. Six pounds for one acre.

	Per pkt.	Per oz.	Per lb.
Extra Early Red. —Early, of flat shape, mild,	\$0.10	\$0.25	\$2.50
Wethersfield Large Red. —A large yielder, excellent to keep,	.10	.20	2.00
Southport Red Globe. —Finest large red sort,	.10	.25	2.50
Southport Yellow Globe. —Handsome and late variety,	.10	.25	2.25
Southport White Globe. —Early, mild flavored, large, not a good keeper,	.15	.25	3.00
Yellow Globe Danvers. —One of the superior yellow globe varieties,	.10	.20	2.00
White Portugal. —Excellent for pickling, should be sown thick,	.10	.25	2.50
Prize Taker. —Yellow skin, white flesh, good cropper, large size,	.10	.25	3.00

ONION SETS

Should be planted as early as the ground can be worked in rows 12 inches apart. Set each about 3 inches apart. When onions are grown from sets they can be used in the green state in June, or will ripen by July.

Red	} at market prices.
White	.	.	.	.	.	.	.	.
Yellow	.	.	.	.	.	.	.	.

PARSLEY

Sow early in spring in drills 1 foot apart, covering lightly; thin out the plants to 3 to 4 inches apart; used for flavoring and garnishing. A single row forms a good edging for flower-beds or walks.

	Per pkt.	Per oz.	Per lb.
Moss Curled. —Very ornamental and productive,	\$0.10	\$0.20	\$1.50
Curled, or Doubled. —A most beautiful variety, moss-like leaves of handsome bright green color,	.10	.20	1.50
"Plain" Leaved —(not curled).	.10	.15	.85

PARSNIP

Make the soil very fine and plant the seed very early, in rows eighteen inches apart, thinning plants to three or five inches in the rows; seeds should be covered about one-half inch deep.

Parsnips, aside from table use, have great value for stock-feeding purposes. Are improved by allowing to remain in open ground through the winter.

One ounce to 150 feet of drill; five pounds for one acre.

	Per pkt.	Per oz.	Per lb.
Abbott's Improved Hollow Crown. —A great cropper, tender and sweet,	\$0.10	\$0.15	\$1.00
Long Smooth White. —One of the best for general cultivation,	.10	.15	1.00

PEAS

The wrinkled varieties, while the sweetest of all peas, are more liable to rot, being tender, and need to be planted thicker and later than the round, hard sorts. Soil needs to be well manured. Have the dwarf varieties in rows two and one-half feet apart; those kinds growing two to three feet high, in rows three feet apart, and the tallest in rows four feet apart. The smooth varieties may be sown as soon as ground can be worked; the wrinkled sorts when soil is well warmed.

One quart to 100 feet of drill; one and one-half bushels to an acre.



Carter's Premium Gem.

	Per lb.	5 lb. lots Per lb.	Lots of 15 lb. Per lb.
East Hartford Extra Early. —True stock, 2½ feet, best early variety in the market, smooth variety.	\$0.35	\$0.30	\$0.23

	Per lb.	5 lb. lot Per lb.	15 lb. lot Per lb.
Alaska. —Hard, blue pea, 2½ feet, extra early, . . .	\$0.35	\$0.30	\$0.23
Gradus, or Prosperity. —An extra early wrinkled pea, very large pods, of magnificent quality, . . .	.40	.30	.26
Premium Gem. —Wrinkled pea, about 12 to 15 inches high, very productive, early, . . .	.35	.28	.24
American Wonder. —Very dwarf, early wrinkled pea, . . .	.35	.28	.24
Nott's Excelsior. —A wrinkled dwarf, of excellent variety, early, . . .	.35	.28	.25
Sutton's Excelsior. —Similar to Nott's Excelsior, but producing larger and more abundant pods, . . .	.40	.30	.26
Daisy or Dwarf Telephone. —Dwarf habit, wrinkled, large pods, second early, . . .	.35	.28	.24
Everbearing. —Very productive, peas large and wrinkled, two and one-half feet high, . . .	.35	.28	.24
Advancer. —An old and choice variety, two and one-half feet high, wrinkled, . . .	.35	.28	.24
Heroine. —Medium early, wrinkled, two to three feet high, quality perfection, . . .	.35	.28	.24
Thomas Laxton. —Of similar growth to Gradus, a few days later, pods are deep rich green. In the judgment of many the Thomas Laxton is even sweeter and finer flavor than Gradus. . . .	.40	.30	.26
Telephone. —Four feet high, large peas of rich, sugary flavor, . . .	.35	.28	.24
Champion of England. —An old standard variety, late, five feet high, . . .	.35	.28	.24
Laxtonian. —Large dark green pod, best early dwarf, . . .	.40	.30	.26
Canada Field. —For stock purposes, (60 lbs. to the bushel,) . . .		at market price	

PEPPER

Should be started in hot beds; and transplanted into open ground by end of May; set in rows eighteen inches apart and plants about twelve inches apart in the rows.

One ounce of seed will produce about 3,000 plants.

	Per pkt.	Per oz.
Sweet Mountain. —Largely grown for both market and home use, . . .	\$0.10	\$0.50
Bull Nose. —This has long been the standard sweet sort, . . .	.10	.50
Ruby King. —Most popular large red pepper in cultivation, . . .	.10	.50
Large Squash. —Thick fleshed, early hot variety . . .	.10	.50
Long Red Cayenne. —The true Cayenne, hot and pungent, . . .	.10	.50
Small Red Cherry. —A small smooth and round variety; productive, . . .	.10	.50
World Beater. —Large mild, very prolific . . .	.10	.50

PUMPKIN

To be cultivated in same manner as squash.

	Per oz.	Per lb.
Small Yellow Sugar. —A handsome prolific variety, good keeper, best for pies,	\$0.15	\$1.00.
Large Cheese. —Very large and good keeping variety, . . .	.15	1.00
Connecticut Yellow Field. —Grown largely for stock purposes, . . .	.10	.85.

POTATOES—Northern Grown

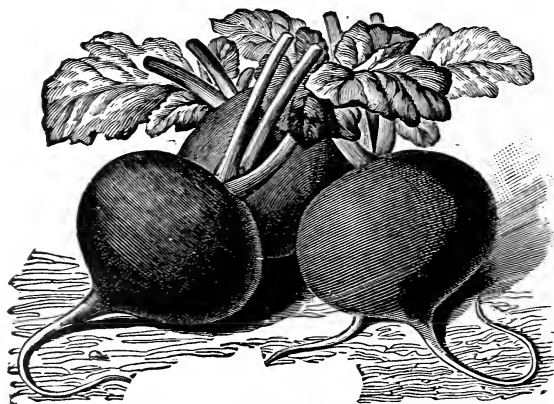
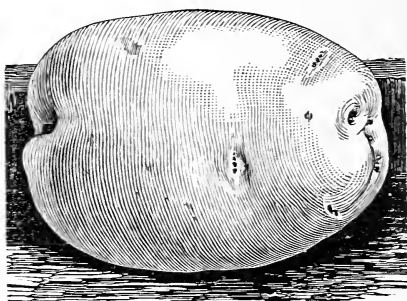
(MAINE CERTIFIED)

Use 12 to 15 bushels, or 5 barrels per acre. (See pages 34 and 35 for description of varieties.)

We offer only certified seed and the varieties listed below are the only varieties that are certified in Maine.

Here in Conn. nearly all markets demand Green Mountains for winter stock. This is the variety that agricultural authorities are always trying to improve and we believe it to be the best variety grown.

Irish Cobbler
Green Mountain
 (Improved)
 at Lowest Market
 Prices.



Deep Scarlet Turnip.

RADISH

For early use sow in spring as soon as ground can be worked. Sow in drills six to ten inches apart and thin out to one inch apart in the rows; as the roots are more tender and brittle when grown quickly, a rich light soil is preferred. For a succession sow every two weeks.

One ounce will sow 100 feet of drill; eight pounds for one acre.

	Per pkt.	Per oz.	Per lb.
Early Scarlet Turnip. —Round red with white tip,	\$0.10	\$0.15	\$1.00

	Per pkt.	Per oz.	Per lb.
Deep Scarlet Turnip. —An all red standard variety,	\$0.10	\$0.15	\$1.00
Early Long Scarlet, Short Top. —The standard early long variety, . . . . .	.10	.15	1.00
French Breakfast. —Most popular variety, of olive shape, red with white tip, quick growing, . . . . .	.10	.15	1.00
Scarlet Globe. —One of the best; quite early, very crisp, . . . . .	.10	.15	1.00
White Turnip. —For summer and winter use, . . . . .	.10	.15	1.25
Black Spanish Long. —Black skin, white flesh—a winter variety, . . . . .	.10	.15	1.00
Round Black Spanish. —The favorite German winter radish, . . . . .	.10	.15	1.00
Rose Color China Winter. —Grows large and tender, good for winter use, . . . . .	.10	.15	1.00

RHUBARB

Propagate from roots in richly prepared soil. Plants should be set five feet apart.

Victoria Giant— \$0.25 a root

SALSIFY, or Vegetable Oyster

Sow early in spring in light rich soil in drills fourteen inches apart and thin out to three inches apart in the row. The roots will be ready for use in October. When cooked the flavor resembles the oyster.

	Per pkt.	Per oz.	Per lb.
Sandwich Island Mammoth. —This variety grows to an unusually large size, roots tender and good flavor,	\$0.10	\$0.30	\$3.50

SPINACH

For very early spring use sow in August, for summer use sow in early spring, in drills about ten or twelve inches apart, covering the seed one inch deep. To obtain a succession sow at intervals of two weeks through the season. One ounce to 100 feet of drill, 10 pounds to one acre.

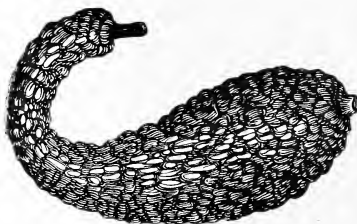
	Per oz.	Per ¼ lb.	Per lb.
Round Thick Leaf. —Produces dark thick leaves, somewhat crumpled,	\$0.10	\$0.20	\$0.60
Large Viroflay. —Grows extra large size, . . . . .	.10	.20	.60
Long Standing, or Evergreen. —Latest in seeding, one of the best for garden use, . . . . .	.10	.20	.60
Savoy Leaved. —Early, wrinkled and hardy, . . . . .	.10	.20	.65
New Zealand. —A very productive spreading plant, . . . . .	.15	.25	1.00

Ask for prices in larger quantities.

SQUASH

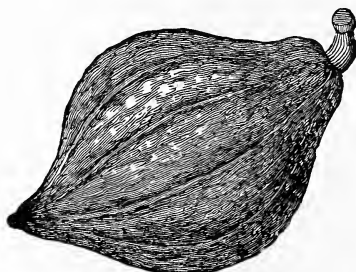
Requires rich, warm soil. Plant in hills nine to ten feet apart for running varieties, and five or six feet apart for bush sorts. Leave two or three plants to a hill. Cultivate frequently.

One ounce will sow twenty to forty hills; two to four lbs. per acre.



Summer Crookneck.

	Per pkt.	Per oz.	Per lb.
Early Summer Crookneck. —The finest bush variety,	\$0.10	\$0.15	\$1.25
Giant Summer Crookneck. —Larger than the early summer,	.10	.20	1.50
Early White Bush Scallop. —Matures early and bears continuously,	.10	.15	1.00
Early Yellow Bush Scallop. —Same as Early White, except in color,	.10	.15	1.00
Hubbard. —The well known and most popular winter squash,	.10	.20	1.40
Boston Marrow. —A bright orange colored squash for autumn, very productive,	.10	.15	1.00
Fordhook. —A desirable running variety,	.10	.15	1.25
Mammoth Chili. —Extra large, grows upwards 100 pounds at times,	.10	.15	1.50
Golden Hubbard. —Similar to the standard Hubbard but smaller and earlier and of a golden red color,	.10	.15	1.50
Cocozelle. —Compact bush growth, fruit oblong, foot or more in length, skin dark green with stripe,	.10	.20	1.50
Blue Hubbard. —Popular variety,	.10	.20	1.75
Table Queen. —Fine for baking,	.10	.20	2.00



Hubbard Squash.

TOMATO



Livingston's Beauty

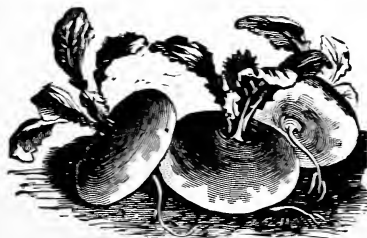
Sow the seed in March or April in hot bed. Transplant when plants are five inches high to open ground, after danger from frost has passed. Should be set four feet apart each way, on mounds of earth, to allow foliage to open and sun to reach the fruit.

	Per pkt.	Per oz.	Per $\frac{1}{4}$ lb.
New Dwarf Champion. —Most popular of dwarf varieties, fruit deep purplish red,	\$0.10	\$0.40	\$1.40
Livingston's Beauty. —A large round solid smooth variety, a glowing crimson color, . . . . .	.10	.35	1.10
Acme. —A standard variety, round, bright pink in color, . . . . .	.10	.35	1.10
Livingston's New Stone. —Large, smooth, solid, scarlet color, . . . . .	.10	.30	1.10
Ponderosa. —Largest variety grown, . . . . .	.15	.60	2.00
Yellow Plum. —Small, elegant, fine for preserves, . . . . .	.15	.60	2.00
Chalk's Early Jewell. —About one week later than Earliana, large, solid fine quality, . . . . .	.10	.35	1.25
Spark's Earliana. —The earliest large red grown, exceedingly productive, . . . . .	.10	.35	1.25
Bonnie Best. —Very early, vigorous grower, smooth, brilliant, scarlet fruit, very prolific, . . . . .	.10	.35	1.25

TURNIP

For early varieties sow as soon as the ground can be worked in spring.

For fall and winter use, seed should be sown from the middle of July to middle of August, seed generally sown broadcast, using one pound to the acre.



Early Flat Dutch.

	Per oz. pkt.	Per $\frac{1}{4}$ lb.	Per lb.
Early Purple Top Milan. —Finest early,	\$0.15	\$0.35	\$1.25
Early Flat Dutch White. —A popular market variety, . . . . .	.10	.25	.65
Purple Top Strap Leaf. —One of the standard flat varieties, . . . . .	.10	.25	.65
Yellow Globe. —Fine for table use, fall and winter, . . . . .	.10	.25	.65

	Per oz. pkt.	Per ¼ lb.	Per lb.
Golden Ball.—Very tender, fine flavored,	\$0.10	\$0.25	\$0.75
White Egg.—Handsome, oval form, thin skin,	.10	.25	.70
Cow Horn.—Pure white, except at top,	.10	.25	.70
Purple Top White Globe.—A thick, round, quick growing variety,	.10	.25	.75

RUTA-BAGA

Seed should be sown in drills thirty inches apart, thin out to one foot apart in the row.

	Per oz. pkt.	Per ¼ lb.	Per lb.
American Purple Top Swede.—Flesh deep yellow, free growing,	\$0.10	\$0.25	\$0.75
White Rock or Sweet German.—White and sweet, a good keeper,	.10	.25	.75
Skerving's Improved.—Standard field variety,	.10	.25	.75
Long Island Purple Top.—Yellow turnip of best quality,	.10	.25	.75

HERBS

	Per pkt.	Per oz.
Summer Savory,	\$0.10	\$0.50
Sage,	.10	.40
Sweet Marjoram,	.10	.50
Thyme,	.10	.50
Dill,	.10	.20

SWEET PEAS

	Per pkt.	Per oz.	Per ¼ lb.	Per lb.
Spencer Mixed, large flower with long stem	\$0.10	.25	.75	\$2.50

TOBACCO

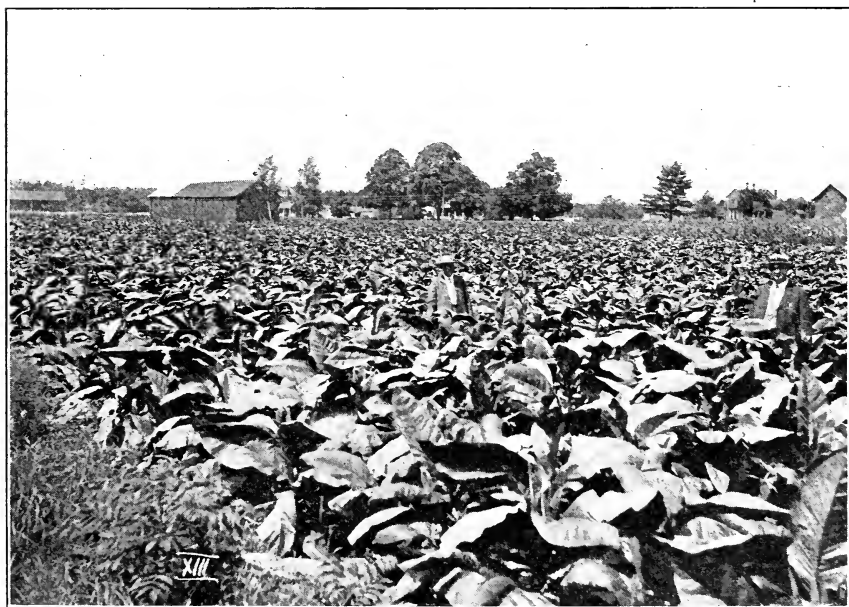
We are very careful in the selection of our tobacco seed, growing much of it on our own farm and saving the seed from only such plants as bear the correct type of leaf. We buy only of the most reputable growers. This seed is thoroughly blown which removes all the light seed, as we believe the heavier seed makes the strongest plants.

	Per ½ oz.	Per oz.	Per lb.
Willow Brook Broadleaf.—Specially grown and selected,	\$0.25	\$0.50	\$7.00
John Williams' Broad Leaf,	.25	.50	7.00
Havana. Special selected type, round point leaf, very choice,	.25	.50	7.00
Cuban Type, shade grown,	.40	.75	9.00
Round Tip,(not Havana)	.40	.75	9.00

It Pays to use
OUR COMPLETE FERTILIZER
FOR THE TOBACCO CROP.



A fine crop of Broadleaf on farm of Raymond Howard, Somers, Conn.
Grown on our tobacco Fertilizers.



20 acres Seedleaf tobacco on farm of E. C. Elmore, South Windsor.
Grown on our Fertilizers.

How to Make a Better Lawn

Building for permanence requires the use of *good lawn seed*, but even the best of seed must have a fair chance. Neglect of proper preparation of the seed bed may not show the first few months, but sooner or later will make it necessary to do the whole job over again. Start right — prepare the soil well — *sow good seed* — and have a good lawn — from now on.

Re-Seeding

Every lawn, regardless of how thick the sod may be, is benefited by a light seeding Spring and Fall. Sow about half the quantity recommended for a new lawn. This is particularly advisable in the Fall which is Nature's seeding time. Bare spots should be dug up, fertilized and re-seeded. Thin spots may be scratched up with an iron rake, seeded, top dressed and rolled.

Choice of Seed

A good lawn grass mixture should be composed of nothing but true turf grasses in the right proportions, carefully cleaned to remove dirt, chaff and weed seeds as much as possible. Avoid mixtures containing cheap grasses which do not belong in a lawn. The cost of the seed is the smallest item in the making of a good lawn; it pays to choose good seed.

O. & W. Lawn Grass Mixture is composed exclusively of the best seeds of the choicest fine bladed grasses free from weeds. Sow a pound to every 200 sq. ft. (equals a space ten by twenty feet) double the quantity may be used without harm. Price per lb. 35¢., 5 lb. sacks \$1.50, 50 lb. sacks \$14.00, 100 lb. lots 26¢. per lb.



Sowing

Use plenty of seed. Remember a thick grass sod is the best protection against weeds. To insure even distribution, which is important, divide the seed in half and go over the ground twice, making the second sowing at right angles to the first. Sow on a calm day so the wind will not blow the seed.

Evergreen Lawn Grass Seed

Price per lb. package 45¢., 5 lb. bag, \$2.00, 50 lb. bags, \$18.50, 100 lb. bags, \$35.00.

Shady Places

In spots shaded by trees or buildings, give special attention to fertilizing and watering and sow a special shady place grass mixture. Remember that trees and shrubbery draw heavily on the food and water in the soil, so extra quantities of both must be provided to keep the grass supplied.

Shady Spot Lawn Grass Seed

Price per lb. package 60¢., 5 lb. bag, \$2.50.



The Gardener's Pride

Every gardener strives to have the finest lawn, the most beautiful shrubbery and flowers, and the best vegetable garden in his neighborhood. He is willing to spend considerable time, energy, and money to attain these desired results. He is especially anxious to improve the fertility of his soil. In the past this problem has been solved by the use of liberal quantities of stable manure, but at the present time city gardeners have difficulty in securing manure, and the price in the larger cities is very high. For this reason gardeners are becoming interested in commercial fertilizers, and rightly so, for they contain the same elements of plant food that are supplied by manure, but in much more concentrated form. The questions most frequently asked are, What kind of fertilizer should I buy? and, How should it be used for best results?

Our Special Lawn Fertilizer

For Spring and Early Summer Treatment

To maintain a luxuriant lawn, proper fertilizing is necessary.

The old method of applying stable manure, so objectionable because it carries weed seeds as well as being unsightly and odorous, is no longer practiced. We manufacture a lawn dressing carrying all the essential plant foods so necessary to produce luxuriant growth and dark, rich, green color so much desired.

We recommend for lawns that it be used at rate of 100 lbs. for 7,500 sq. ft.

PRICES (Delivered):

100 lbs.	50 lbs.	25 lbs.	10 lbs.	5 lbs.
\$3.50	\$1.90	\$1.25	\$0.75	\$0.40

Special prices on larger quantities.

We also have for Lawns and Gardens:

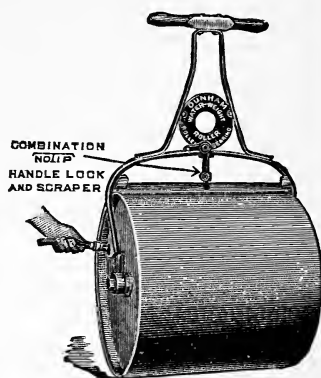
	100 lbs.	50 lbs.	25 lbs.	10 lbs.	5 lbs.
Special Garden Fertilizer	\$3.50	\$1.90	\$1.25	\$0.75	\$0.40
Bone Meal	3.50	2.00	1.35	.75	.40
Sheep Manure	3.25	1.85	1.00	.70	.40
Pulverized Poultry Manure	3.50	1.90	1.25	.75	.40
Hard Wood Ashes	3.00	1.75	1.15	.65	.35
Lime	1.50	.90	.60	.40	.25
Tobacco Dust	4.00	2.25	1.50	.75	.45
Tobacco Stems	1.75				
Alphano Humus	1.50				
Peat Moss (Granular)	200 lb. Bale \$4.50				

Special Prices on larger quantities.

Water Weight Lawn Rollers

At least one rolling a year is necessary to preserve a healthy turf. This should be done early in the spring, as soon as the ground is dry, to re-firm the soil about the roots after it has been loosened and heaved up by the freezing and thawing of winter. The roller should weigh 150 to 300 pounds, depending on the texture of the soil.

The water weight lawn roller has almost entirely superseded the old fashioned cast iron roller. By regulating the amount of water it can be made to weigh as desired.



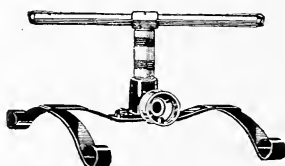
No.	Diameter	Width of Drum	Weight Empty	Weight Full	Net Price	Bearings
601	14"	24"	70 lbs.	175 lbs.	\$15.00	Roller
602	18"	24"	85 "	265 "	18.50	Roller
603	24"	24"	110 "	420 "	22.00	Roller
605	14"	24"	68 "	175 "	13.50	Plain
606	18"	24"	82 "	265 "	16.00	Plain

The Pennsylvania Ball Bearing Lawn Trimmer

This meets the demand for a serviceable tool to take the place of grass shears and other devices for cutting the grass left at the edge of lawns after mowing. The Trimmer will cut within three-eighths of an inch of wall or tree trunk and mow any border wide enough to run one wheel on. Its construction is similar to all the other Pennsylvania products — Crucible Tool Steel in both cylinder and stationary blades. Self-sharpening. Ball bearings with patented Pennsylvania adjustment. Built for service and long life. Light running. Easy to handle. Price \$10.50 net.



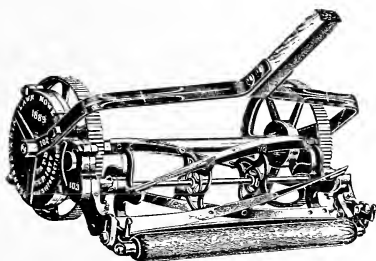
We carry a complete line of hose, sprinklers, shears, rakes, etc.



Lawn Mowers

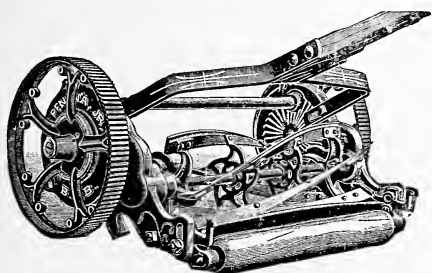
The **Standard Pennsylvania** is the pioneer of all lawn mowers, having an open cylinder, open wheels and a train of gears.

Width of cut	15 in.	17 in.	19 in.	21 in.
Price	\$27.00	\$30.50	\$34.50	\$38.50



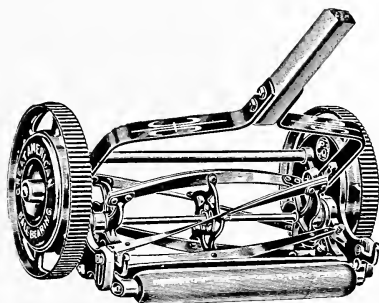
The **Pennsylvania Jr. Ball Bearing** has all the good points of the Standard Pennsylvania, with the addition of some features that make it the most perfect grass cutter in the world.

Width of cut	15 in.	17 in.	19 in.	21 in.
Price	\$27.00	\$30.50	\$34.50	\$38.50



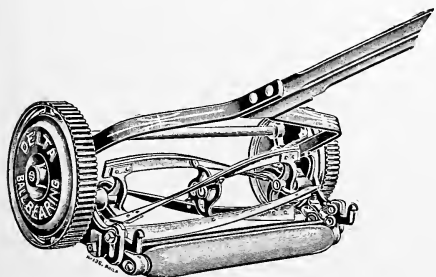
The **Great American Ball Bearing** is the best all-round mower of its type made. The perfectly fitting ball cups and cones insure an easy running machine.

Width of cut	15 in.	17 in.	19 in.	21 in.
Price	\$17.50	\$19.50	\$22.50	\$25.00



The **Delta** a type of lawn mower that will give good service and satisfaction on any kind of a lawn.

Width of cut	14 in.	16 in.	18 in.
Price	\$11.50	\$12.00	\$12.50



Braun Grass Catchers	15 in.	17 in.	19 in.	21 in.
	\$3.50	\$3.75	\$4.00	\$4.25

List of Grass, Clover and Millet Seed

(At market Prices)

Timothy, or Herd's Grass. One of, if not the commonest and best known grasses. Very valuable for hay. Perennial, fibrous and often bulbous rooted. (45 lbs. to the bushel.)

Red Top. Is a fine permanent grass. Often sown with timothy and red clover, in which case the clover soon disappears to be replaced by timothy, which in turn gives way to the red top. Very valuable in mixtures for permanent pastures.

Chaff Red Top 10 lbs. to the bushel. Fancy or cleaned 35 lbs. to the bushel.

Kentucky Blue Grass. Also called June grass. Root-creeping, perennial, flowers in June. It requires about two to three years to become well set and does not arrive at perfection as a pasture grass until the third or fourth season. (14 lbs. to the bushel.)

Orchard Grass. A perennial grass, flowers from June to July. Very valuable for pastures, also in connection with timothy and clover for hay crops. When used with timothy use one bushel orchard and 8 lbs. clover. If sown alone use three bushels to the acre. (14 lbs. to the bushel.)

Sudan Grass. A quick growing annual. A forage crop of great value. Stools freely. Grows 3 to 5 ft. tall, two and sometimes three crops can be cut. Grows until frost. When sown broadcast use 25 lbs. per acre.

Rhode Island Bent. Root-creeping, perennial, flowers in July. Very valuable for lawn purposes. Sow from three to four bushels to the acre. (10 lbs. to the bushel.)

Large Red, or Mammoth Clover. Grows from four to five feet high; stocks so coarse that cattle will eat but leaves only, but by its judicious use, exhausted lands may be reclaimed. (60 lbs. to the bushel.)

Medium Red Clover. The most important of all the varieties of clover for the practical purposes of agriculture. Sown with timothy and other grasses it produces desirable hay or pastures. (60 lbs. to the bushel.)

White Clover. The value of this clover is well known; it is found in most every natural pasture. It is adapted to all soils. Being deep-rooted it withstands drought when grown on dry, sandy sections. It should form a part of all mixtures for permanent pastures. (60 lbs. to the bushel.)

Alsike, (Clover). This is one of the hardy varieties. It resists cold, extreme drought and wet, and on rich warm soils yields immense crops of hay, or pasture of good quality. (60 lbs. to the bushel.)

Alfalfa (Clover). A heavy forage crop doing well in almost all localities. Requires well limed soil and good drainage.

Hungarian (grass) Millet. Splendid forage crop for light land. On rich land two crops may be grown the same season. Withstands drought and yields abundantly. (48 lbs. to the bushel.)

Golden, or German Millet. A heavier cropper than the Hungarian, and needs a longer season and a stiffer soil, stands up well, is easily cured, makes a coarse, harsh hay, which is greedily eaten by all kinds of stock. (50 lbs. to the bushel.)

Japanese Millet. This is by many considered the most valuable of all forage plants. It makes more hay than German millet or any other. Although it grows large, sometimes seven or eight feet high, the hay is of excellent quality. It is adapted to all sections.

Use O. & W. Special Grass Fertilizer
The Fertilizer That Makes Grass Grow.

Leguminous Plants as Soiling Crops

All the leguminous plants (peas, clovers and beans, etc.,) have the power of taking up the free nitrogen in the air and converting it into available forms of ammonia so very valuable as a fertilizing ingredient to the soil.

Therefore the roots (or, as in some cases where the entire plant is turned under) provides a large supply of available ammonia for the crops which are to follow.

Cow Peas,	.	.	.	.	.	at lowest market prices.
Soja Beans (Soy Beans),	.	.	.	.	.	" " "
Mammoth Clover,	.	.	.	.	.	" " "
Medium Clover,	.	.	.	.	.	" " "
Vicia Villosa, or Hairy Vetch,	.	.	.	.	.	" " "

GRAINS

Barley,	.	.	.	.	.	at lowest market prices
Japanese Buckwheat,	.	.	.	.	.	" " "
Rye,	.	.	.	.	.	" " "
Seed Oats,	.	.	.	.	.	at market price

Canada Field Peas. Grown largely with oats as fodder crop. At market prices.

Use "O. & W" Special Grain and General Crop Fertilizer

Legume Inoculation HUMOGERM

The Best Inoculation for All Legume Seeds Means Better Crops, Better Soils, Less Fertilizer Expense

Seeds of all Legumes — Clovers, Alfalfa, Sweet Clovers, Garden Peas, Beans, and Sweet Peas, Vetches, Soy Beans, etc. — will yield far better results if inoculated with HUMOGERM, and in addition, leave in the soil a heavy deposit of nitrogen which benefits all succeeding crops. No other inoculant will produce the wealth of nodules obtained by using HUMOGERM. We believe in inoculation, we favor the soil medium, and we believe in HUMOGERM. Of all the inoculants manufactured, we believe it is the most effective, and cheapest, consistent with high quality.

WHAT HUMOGERM IS: A culture of bacteria especially selected and bred for maximum vitality and ability to take nitrogen from the air. They are carried in a sterilized, finely ground, porous humus medium that keeps them fresh, active and vigorous. Economical and easy to use, HUMOGERM is a sensible insurance and a profitable investment.

HOW TO ORDER: Specify crop and number of bushels you wish to inoculate (one-bushel size contains sufficient bacteria to thoroughly inoculate one bushel of designated variety of legume seed).

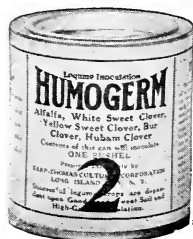
PRICES ARE LOW. For small seeds — Clovers, Sweet Clovers, Alfalfa, etc.

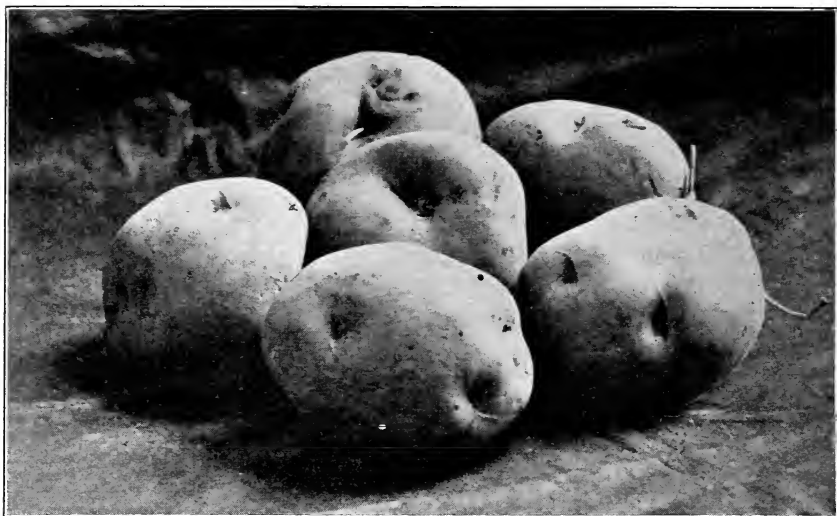
1/4-bus. size . . .	\$0.35	1 -bus. size . . .	\$1.00
1/2-bus. size . . .	.60	2 1/2-bus. size . . .	2.25

New reduced prices on cultures for large-size seeds — Soy Beans, Cowpeas, Peas, Beans, Vetches, etc.

1/2-bus. size . . .	\$0.35	1 -bus. size . . .	\$0.60
5-bus. size . . .			\$2.25

Special Garden Size for Garden Peas, Beans, and Sweet Peas, 25 cts.





Northern Grown Certified Seed Potatoes

Certified Irish Cobbler.—An excellent extra early variety, will mature in seven weeks from time of planting; in color pure white with deep eyes, usually of good cooking quality.

Certified Improved Green Mountain.—This variety is too well known to require any description; it is recognized as the standard of excellence in all New England; white skinned, oval formed, smooth and attractive and a good yielder.

Our certified seed potatoes have been carefully selected from fields in Aroostook County, Maine, New Hampshire and Prince Edward Island.

Don't waste labor and fertilizer on poor seed. Get the best.

How Much Seed?

The experience of successful growers has demonstrated the wisdom of using plenty of seed. Under most conditions the rows should be 30 to 36 inches apart, with seed pieces spaced 12 inches apart in the row. From 15 to 25 bushels of seed per acre will be required for such planting, the exact amount varying according to the size of the seed pieces.

The production of the commercial crop of potatoes in this country is falling more and more into the hands of experts. In the first place, the profitable production of potatoes requires the use of rather expensive planting, spraying, and harvesting machinery, and unless owned co-operatively such equipment is not often available to the man who grows less than ten acres. Moreover, the successful grower of today must know something of varieties, diseases, and insects, and how to fertilize, grade, and market the crop. In fact, it may be stated safely that the low-cost potatoes of to-day are produced by expert farmers who plant more than ten acres. The grower who drops inferior seed potatoes by hand, covers them with a hoe, and digs them with a fork is simply out of the game when it comes to competing with growers who appreciate the importance of good seed, liberal fertilization, thorough spraying, and the use of modern labor-saving machinery. Even the farmer who grows only a few potatoes for his own use can afford to plant good seed, to spray, and to fertilize.

Use O. & W. High Grade Potato Fertilizer



A field of Certified Irish Cobbler potatoes, Aroostook County, Maine.



Harvesting Certified seed potatoes on an Aroostook Maine potato farm.

THE IMPORTANCE OF SPRAYING

Our Agricultural Colleges and Experimental Stations backed by both the State and Federal Governments have been largely instrumental in awakening the general public to the real importance of spraying. This has been accomplished through numerous bulletins and circulars issued from time to time and distributed by tens of thousands, so that first hand and reliable spraying information has been sent out broadcast into every nook and corner of the United States. In fact, so thoroughly has the matter of spraying been investigated and advertised, that no one today is ignorant of its importance, but, there are yet those who have not given it attention for different reasons, while others are profiting by this neglect and getting better prices right along for their products.

"Better Fruit and more of it" has become the slogan of every fruitman for it means higher prices for his crops. But this also means better care of his trees and vineyards — higher cultivation and protection from the enemies of tree, plant and vegetable life by proper fertilization, pruning and spraying at the right periods. In fact, spraying is now considered so important that practically all fruit offered for sale today in the public markets is of the sprayed kind. No other will do. Unsprayed fruit is usually small, knotty and spotted and cannot compete with the sprayed article, even if sold at a much lower price.

PLANT AND TREE ENEMIES

Two kinds of enemies attack fruit trees and plants, namely; insects and fungous diseases. The application of substances, usually liquid, to the tree or plant for the purpose of preventing or destroying these constitutes spraying, insecticides being used for the insects and fungicides for the fungous growths. We spray to destroy insects and to prevent fungous diseases. For convenience, injurious insects are usually divided into two classes, based upon their feeding habits; eating or chewing insects and sucking insects.

FEEDING HABITS OF INSECTS

Chewing insects are those having jaws by means of which they bite off and eat portions of the tissues of the plant, such as foliage, fruit buds, tender bark, etc. Examples of this class are — the codling-moth which causes wormy apples, the plum curculio, the potato "bug" or beetle, caterpillars, etc. Most of the insects of this class are very easily controlled by applying to their food arsenical poisons, such as Paris green and arsenate of lead which is placed within their feeding range to be found by them sooner or later. It is with this class that success depends greatly upon spraying at the proper time; for example, the codling-moth caterpillar may be killed if there is some poison on the apple just as the insect eats its way in, but after once getting into the fruit it is safe.

Sucking insects are those furnished with a beak or slender tube with which they pierce the plant tissue and suck out the sap. Examples of this class are San Jose scale, oyster scale, scurfy scale, aphias, plant lice, etc. These insects are safe from poisons because we cannot get any poison into their food and must be killed by a direct application of such insecticides as will kill by contact, of which the most common is lime sulphur. In fighting this class of insects very thorough work is required, for every individual insect must be hit by the spray.

FUNGOUS DISEASES

Fungous diseases are parasitic consisting of plants or growths of low form, which live on other living plants. Examples, apple and pear scab; black, brown and bitter rot, mildew, etc. These diseases are disseminated almost wholly by the means of spores, which are extremely small, disk-like bodies corresponding to the seed of higher plants and are usually borne on the surface. These spores are produced in great abundance and each one is capable of starting a new fungus. They are carried from one plant to another by means of wind, water and insects. For fungous diseases, then, a spray is required which will kill the spores and the important point is to commence spraying with fungicides before the disease presents itself, as spraying for fungous diseases is a preventive rather than a cure. For this purpose the combination of lime and blue vitrol, known as Bordeaux mixture, is the principal remedy. Here again thoroughness is of the utmost importance.

Insecticides and Fungicides

Arsenate of Lead Powder. Can be used for dusting (mixed with Hydrated Lime) or spraying to kill most chewing insects on Plants, Trees, Shrubs, etc.

Black-Leaf "40". A concentrated solution of Nicotine Sulphate — For Spraying to destroy sucking insects.

Bordeaux Mixture, Powdered. A combination of copper sulphate and lime, used to control black rot on grapes, blight on potatoes also apple-scab, bitter rot, leaf spot and downy mildew.

Bug Death. A non-poisonous insect killing powder, for worms, bugs and caterpillars.

Calcium Arsenate Powder. Used either as a dust or spray.

Copper Sulphate (Blue Stone)

Crow Repellent — non-poisonous, used to protect corn after planting from birds and animal pests.

Fly Spray Liquid. For protection of horses, cattle, dogs and hogs from flies, mosquitoes, fleas and lice.

Lime Sulphur Solution or Lime Sulphur Powdered. For dormant spraying of fruit and shade trees also bushes against San Jose and Oyster Shell Scales, also for peach leaf curl and brown rot of peaches.

Paris Green. May be applied as a dust or as a wet spray, for killing potato bugs, cut worms, etc.

Pyrox The powerful triple-duty spray. Kills bugs — control diseases — improves foliage. It kills leaf-chewing bugs, prevents blights and rots, and stimulates foliage all in one.

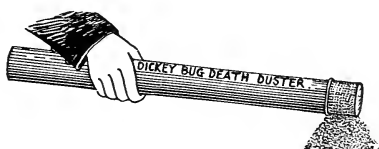
Scalicide. Applied in the Fall it controls scale of all kinds. The delayed dormant spray with Scalicide controls scale, aphid, leaf roller, European red mite and fungus cankers.

Kayso. The well known casein-lime spreader.

Cro - Cus

Corn crop insurance against crows. Repels crows, keeps seeds from rotting. Labor, time and seed saved. No replanting. Pint can treats 8 pecks of corn.

Pint \$1.25
 1/4 Pint .60



Dusting

The Modern Method Of Crop Protection

The rapid strides which the dusting method of crop pest control has made in the past four or five years is directly traceable to the efforts of the Niagara Sprayer Company. Its success, however, has come because it has done those things which were claimed for it, and brought results by the most direct route.

Dusts of infinite fineness have been perfected, containing those properties necessary to kill insect pests and prevent diseases. Not only do the Dusts do the work done by liquid sprays, but their development has opened new fields of Crop Pest Control.

Niagara Dusts are now being made that stick "through Wind and Rain," and exhibit toxic properties to many fungi and insects heretofore unequaled by either wet or dry materials.

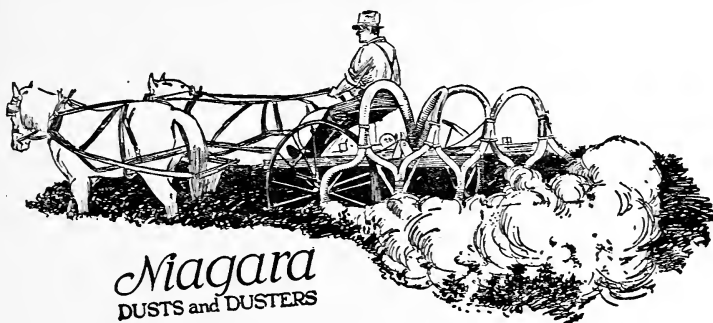
Niagara Dusting Material

Standard Mixtures

		Price Per 100 lbs.
DORMANT DUST.	(in metal drums 50 lbs. each)	\$10.00
Delayed dormant dusting for San Jose scale, Red mite and aphid on apples, pears, and shade trees.		
SULFODUST.	Dusting Sulphur with special spreader and sticker, fineness 95%, 200 mesh. (in bags)	\$4.00
For apple scab, brown rot, etc. Standard fruit dust fungicide.		
KOLOUDUST.	(in bags)	\$5.20
A new patented dusting sulphur of infinite fineness. A dust you can see stick. Superior to Sulfodust.		
KOLOTEX.	A Sulphur Poison dust that will stick. (in bags)	\$7.90
The New Exclusive Niagara Sulphur Fungicide with Lead Arsenate.		
KOLOKIL.	A Sulphur Heavy Poison Dust. (in bags)	\$9.00
KOLOPEACH.	A Sulphur Small Poison content Dust (in bags)	\$6.25
suitable for dusting peaches and other stone fruits.		
A-1 MIXTURE.	A Contact Poison Dust. High percentage of quickly volatile nicotine fumes. 3% actual 100% nicotine. (in metal drums)	\$15.75
For aphids, red bugs, pear psylla, etc. The best contact dust for sucking insects, both out doors and greenhouses.		
50 lb. can \$8.50 — 25 lb. can \$5.00 — 10 lb. can \$2.50.		
VITIDUST.	Copper, Lime, Lead Arsenate. Mixture for grapes. (in metal drums)	\$10.00
COPODUST.	A Copper-Lime Dust. (in metal drums)	\$8.65
The New Exclusive Niagara Copper Lime Fungicide for blight of Potatoes, and other field crops.		
COPOTEX.	A Copper Lime Dust, with Poison added for potato bugs, etc. (in metal drums)	\$11.50
WILDFIRE DUST.	A Copper Lime Dust for tobacco. (in metal drums)	\$8.00
50 lb. can \$5.00 — 25 lb. can \$3.00 — 10 lb. can \$1.50.		

NIAGARA DUSTING MACHINES

For Vegetable and Fruit Crops



Niagara Traction Crop Dusters for dusting low crops which are now so constructed that they will also dust fruit trees with their own traction power.

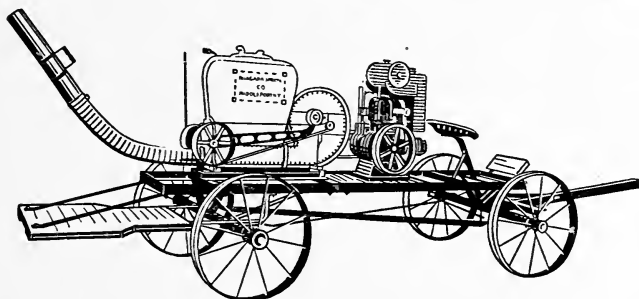
Model CP Heavy Duty (4 row 8 nozzle) Price \$300.00. Net Cash Price \$285.00

Orchard Attachment Price \$22.10. Net Cash Price \$21.00

Model CP Light Duty (4 row 8 nozzle) Price \$215.80. Net Cash Price \$205.00

Orchard Attachment Price \$17.37. Net Cash Price \$16.50

Model UP Light Duty (3 row 6 nozzle) Price \$194.75 Net Cash Price \$185.00

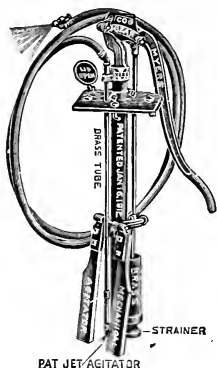


Niagara Model F Fruit Duster mounted on truck equipped with either a Cushman or New Way engine. Price complete as shown \$440.00. Net Cash Price \$418.00

Model U Fruit Duster. A Duster well adapted for use in small orchards, equipped with a Cushman 3 H. P. motor. Price complete mounted on truck \$315.75 Net Cash Price \$299.00



Niagara Blower Gun Crank Type, Brush Feed, Price \$22.00. 2 row "Y" attachment Price \$2.00. **Niagara Hand Plunger Gun** Price \$1.25.



and Myers graduating Vermorel nozzle for open head barrel. Price \$15.00. **Net Cash Price \$14.25.**

Cut below shows Myers No. 6 Overhead Four Row Adjustable Potato Sprayer, mounted on plank that bolts to bottom of wagon box, and is complete with all hose and nozzles. The adjustable features adapt it to any kind of work or condition—nozzles adjustable in width to suit any width row and are so arranged that they discharge the spray either directly downward on top of the plant or either forward or backward as desired—can be

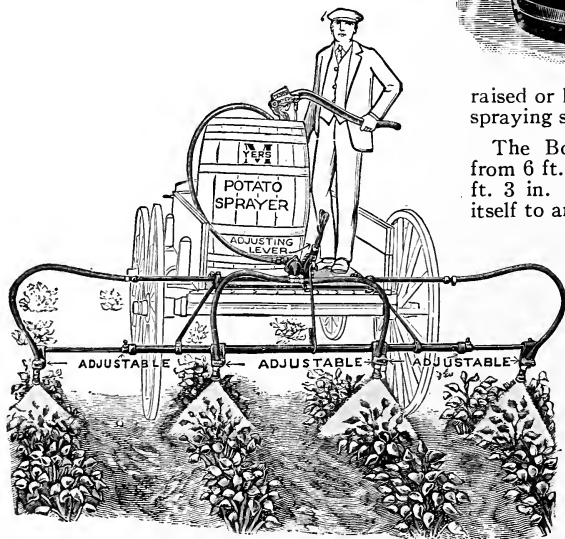


FIG. 480

Myers Barrel Spray Pumps

No. R318B—Myers Cog Gear Barrel Spray Pump, complete with one lead of 15 feet of $\frac{1}{2}$ inch 5 ply discharge hose, graduating Vermorel nozzle, and mechanical agitator for closed head barrel. Price \$16.00. **Net Cash Price \$15.20.**

No. R318—Myers Cog Gear Barrel Spray Pump only, with mechanical agitator but without hose or nozzle. Price \$12.00. **Net Cash Price \$11.40.**

No. R305B—Myers Cog Gear Barrel Spray Pump with both jet and mechanical agitators, complete with 15 feet of $\frac{1}{2}$ inch 5 ply spray hose



raised or lowered a distance of 20" for spraying small or large plants.

The Boom is adjustable in width from 6 ft. 1 in. narrowest point, to 11 ft. 3 in. widest point, thus adapting itself to any and all conditions. Will pass through a 7 ft. gate. Can be used in connection with any Barrel Spray Pump. The cut at left shows Myers No. R318 Spray Pump being used with this sprayer.

No. 6—Myers Hand Overhead 4 row adjustable sprayer complete with all necessary hose and nozzles. (Pump and Barrel not included).

Price \$20.00.

Net Cash Price \$19.00

Figure 480 illustrates iron pipe extension made of $\frac{1}{4}$ in. steel pipe threaded at both ends. Price 4 ft length with coupling 50¢. Price 8 ft. length with coupling 80¢.

The Myers Cog Gear Spray Pump

(Double Acting)

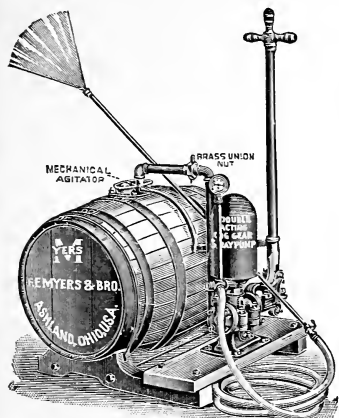
With brass valves and ground bevel brass seats, 2" seamless brass removable cylinder, hemp packed plunger and double lever shut-off discharge.

No. R316 B Pump complete, 50 gallon barrel mounted as shown, with pressure gauge, one 15 ft. lead of $\frac{3}{8}$ in. 7 ply discharge hose, one Fembro nozzle, one 8 ft. pipe extension with lever shut off and mechanical agitator.

Price \$54.00 Net Cash Price \$51.30

No. R316 C Pump complete, 50 gallon barrel mounted as shown, with pressure gauge, two 15 ft. leads of $\frac{3}{8}$ in. 7 ply discharge hose, two Fembro nozzles, two 8 ft. pipe extensions with lever shut offs and mechanical agitator.

Price \$60.00 Net Cash Price \$57.00



No. R336 B. Myers Portable Sprayer

Complete as shown in illustration, with dasher agitator, 15 feet $\frac{1}{2}$ in. 5 ply discharge hose, 8 foot extension and Vermorel nozzle.

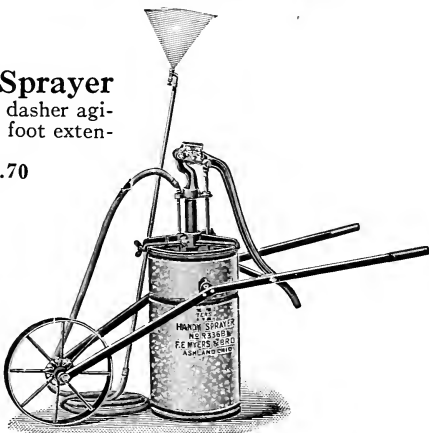
Price \$26.00 Net Cash Price \$24.70



No. R324 Myers Cog Gear Lever Bucket Spray Pump

With agitator, complete with detachable hose and graduating Vermorel fine sprinkling and solid stream nozzle.

Price \$6.50
Net Cash Price \$6.20



No. 327 1/2 Myers Little Giant Brass Bucket Spray Pump

With agitator, complete with hose and imperial combination fine, coarse spray and solid stream nozzle, with malleable foot rest. - - - - -

Price \$4.30
Net Cash Price \$4.10

The Hudson Perfection Sprayer

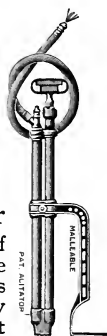
Combines all the essential features of a successful compressed air sprayer. The tank is riveted and soldered, the pump is all brass, the nozzle is the most satisfactory shut-off nozzle made, it will close tight under any pressure and there is consequently no leakage. It will handle all solutions.

No. 110 Brass Perfection \$9.00 net

No. 140 " Junior 7.00 "

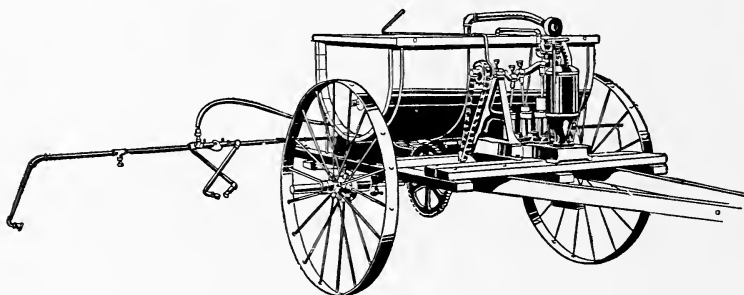
Vermorel (Knapsack) Sprayer \$20.00 net

D. & B. Galv. Pressure Can 5.00 "

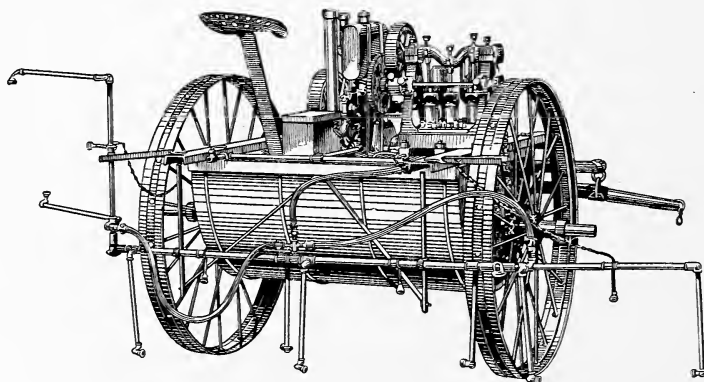


HARDIE

DEPENDABLE SPRAYERS



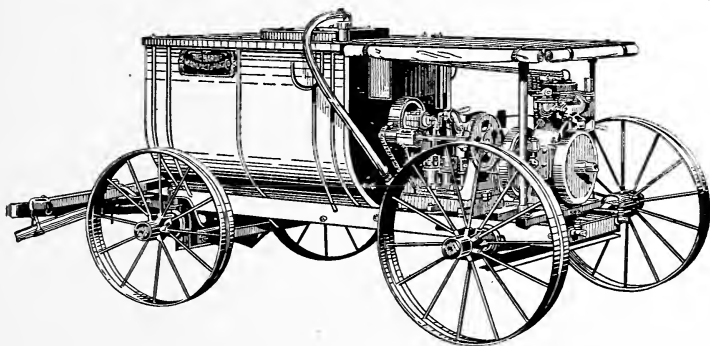
This Hardie Perfection traction row sprayer discharges 8 to 9 gallons per minute at 300 lbs. pressure yet the draft is so light that any ordinary team easily pulls it. The 4-row Nixon Boom holds the 12 nozzles right where you want them and is easily adjustable. This outfit is perfectly balanced and handles easily under all conditions. Price \$300.00. **Net Cash Price \$285.00**



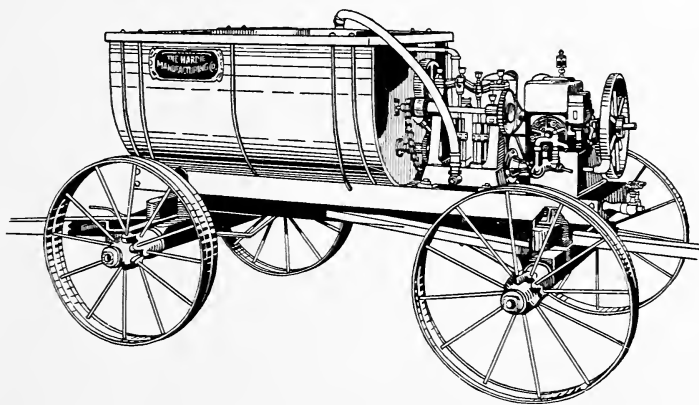
The Hardie Superior is a combination orchard and row power sprayer, discharging 9 gallons per minute at 300 lbs. pressure. It is powered with a 4 h.p. Cushman Engine. This machine is fitted with the famous 4-row Nixon Boom with 12 nozzles, 50 feet of high pressure hose, and one orchard gun. The price is \$450.00. **Net Cash Price \$427.50.** Same outfit without hose and gun \$425.00. **Net Cash Price \$403.75**

HARDIE

DEPENDABLE SPRAYERS



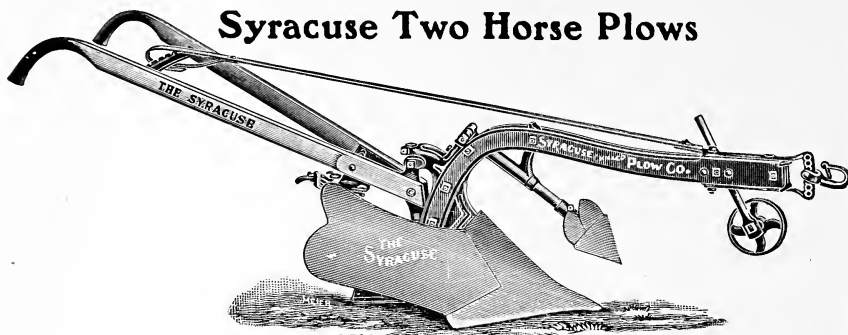
The Hardie No. 12 Mogul fully fills the order from growers for larger capacity, higher pressure, but no more weight. This 200 gallon sprayer, with a discharge capacity of 12 gallons per minute, mounted on the famous Hardie Autoplex truck, weighs only 1800 pounds and will do far more work than any other sprayer of equal weight. Complete \$685.00. **Net Cash Price \$650.75.**



The Hardie Spray Ring Special is the lightest, highest powered, lowest priced sprayer in its class. Powered with a 2 h.p. engine, the Hardie Duplex Pump is driven by automobile type roller chain, the most flexible and positive drive known. Material and workmanship of the highest quality only go into this sprayer. Price \$350.00. **Net Cash Price \$332.50**

The Hardie Sprayer line includes everything from the smallest hand outfits to the largest power units built.

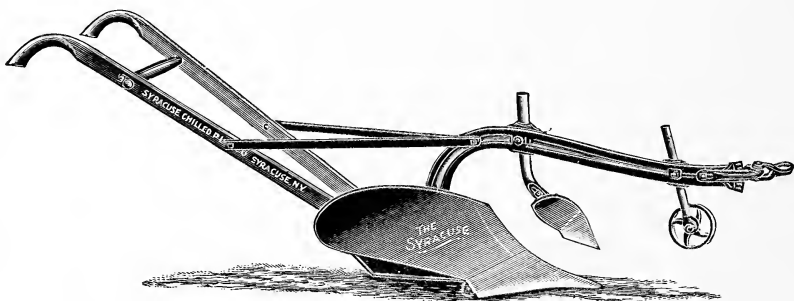
Syracuse Two Horse Plows



John Deere Syracuse No. 821 Series Truss Steel-Beam Hillside Plows

Ample throat room and close fitting joints prevent clogging. Choice of white iron or tempered steel mouldboards adapts them to a variety of soils. Steel and malleable iron give maximum strength and unusual light weight. Two-piece truss-style beam will not bend or break. Renewable shoe protects standard and serves as landside.

No. 821 Chilled comp. with wheel and jointer	Price \$32.40	Net Cash Price \$30.80
No. 821 Steel comp. with wheel and jointer	" 34.90	" " " 33.15
No. 822 Chilled comp. with wheel and jointer	" 31.40	" " " 29.80
No. 822 Steel comp. with wheel and jointer	" 33.65	" " " 32.00



John Deere Syracuse 31 Series Plows

Furnished with steel clevis, soft center steel mouldboard, solid steel landside cast shoe and chilled share.

No. 31 (size of furrow: Depth 5 to 8 inches; width, 12 to 15 inches). Price complete with wheel and jointer	\$31.65	Net Cash Price \$30.05
No. 32 (size of furrow: Depth 5 to 7½ inches; width 10 to 13 inches). Price complete with wheel and jointer	\$29.65	Net Cash Price \$28.15

John Deere Syracuse 400 Series Straight Landside Chilled Plows

In hard, dry ground or in gravelly soil these plows give remarkable results. Detachable chilled iron; keen-edge shin piece enables you to renew cutting edge of mouldboard quickly and at small expense — a big advantage when plowing in sod or stiff clay.

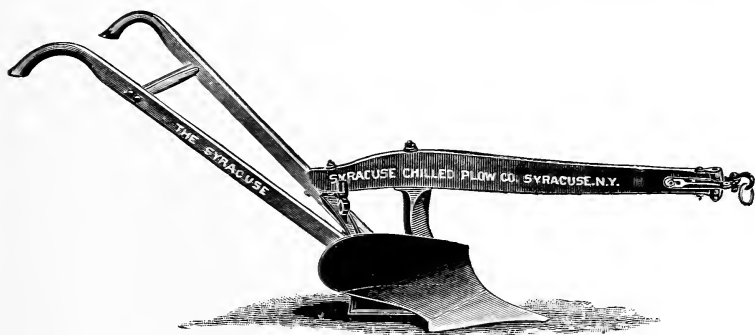
No. 401 Price complete with wheel and jointer	\$30.15	Net Cash Price \$28.65
No. 402 Price complete with wheel and jointer	28.15	" " " 26.75

Syracuse One Horse Plows

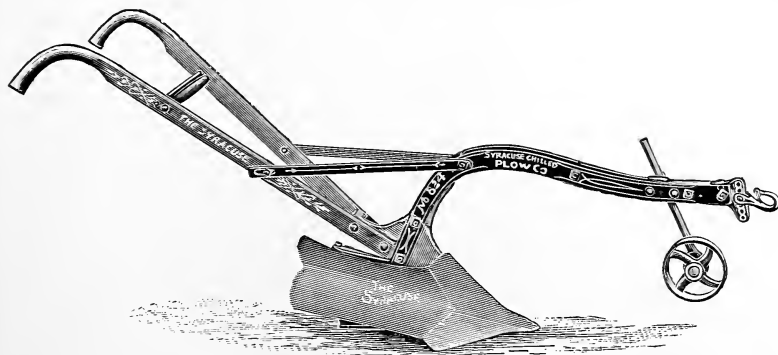


This represents the original Syracuse Chilled Plow.

No. 5-78 with wheel only Price \$13.15 Net Cash Price \$12.50

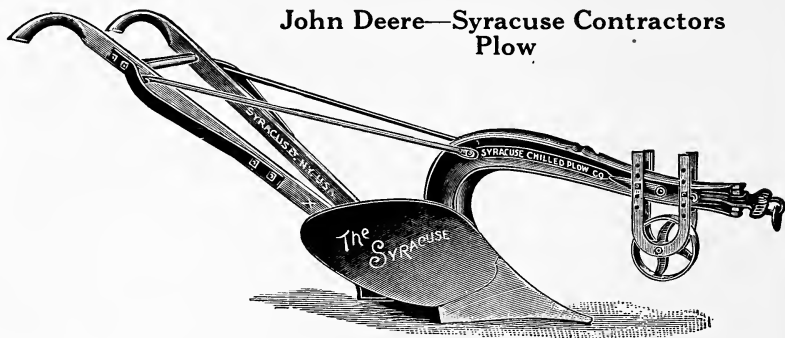


No. 52L with wheel only	Price \$17.25 Net Cash Price \$16.40
" " " and Jointer	" 20.85 " " " 19.80
No. 53L with wheel only	" 19.25 " " " 18.40
" " " and Jointer	" 22.85 " " " 21.70



No. 823 chilled M. B. with wheel only	Price \$20.65 Net Cash Price \$19.60
" " " " and Jointer	" 25.90 " " " 24.60
No. 824 chilled M. B. with wheel only	" 15.65 " " " 14.85

John Deere—Syracuse Contractors Plow

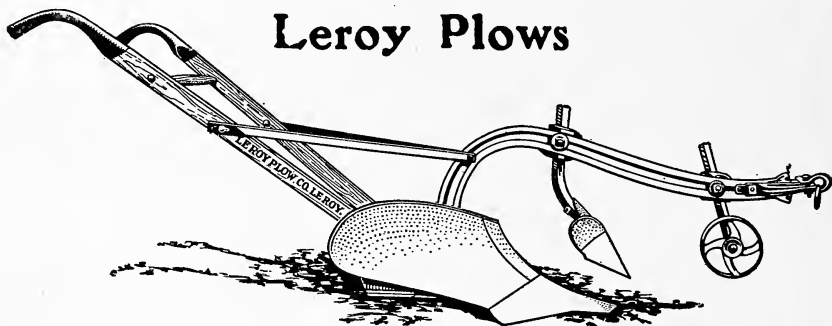


The No. 1 turns furrows 5 to 9 inches deep and 12 to 15 inches wide. Built to stand the strain—extra heavy beam, share and landside, steel wheel frame, loop handle wear irons.

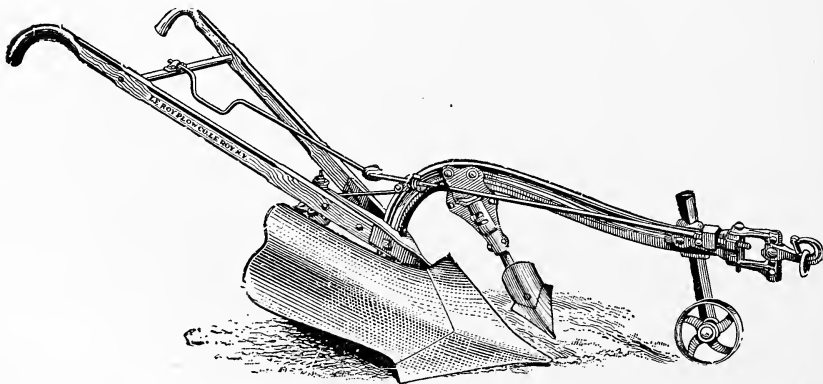
Price with gauge wheel and extra share

Price \$32.00 Net Cash Price \$30.40

Leroy Plows

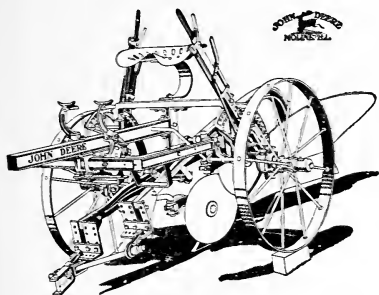


No. 107 Leroy chilled M. B. with wheel only .	Price \$18.65	Net Cash Price \$17.70
No. 109 Leroy chilled M. B. with wheel and jointer "	28.15	" " " 26.75
No. 109 Leroy steel M. B. with wheel and jointer "	29.65	" " " 28.15
No. 110 Leroy chilled M. B. with wheel and jointer "	30.15	" " " 28.65
No. 110 Leroy steel M. B. with wheel and jointer "	31.65	" " " 30.10



No. 30 Leroy steel M. B. with wheel and jointer Price \$33.65 Net Cash Price \$32.00

John Deere Two-Way Plow



Ideal for plowing hillsides or irregular fields. Leaves no dead furrows or back ridges. Patented features make this the easiest plow to control.

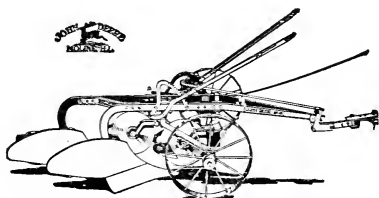
12" Steel Combination with 2 H. H.
Price \$110.00. Net Cash Price \$104.50.

14" Steel Combination with 3 H. H.
Price \$114.00. Net Cash Price \$108.30.

JOHN DEERE NO. 40 TRACTOR PLOW

Made to follow the Fordson Tractor. Has self-adjusting hitch and rolling landslide, the bottoms always run true and level and all of the weight is wheel carried therefore the "40" runs exceptionally light.

Either 24" or 28" cut with Combination Rolling Colters and Jointers. Price Complete (with steel Mouldboards) \$105.00. Net Cash Price \$99.75.

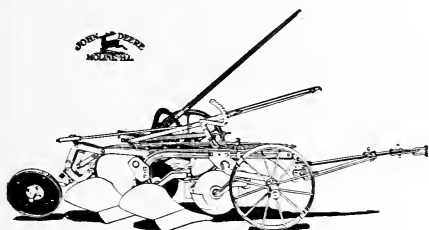


JOHN DEERE NO. 5 TRACTOR PLOW

Popular for use with medium sized tractors. Equipped with John Deere steel bottoms, famous for good work and long wear. Stiff hitch, adjustable to any make of tractor.

28" cut, Price \$128.00.

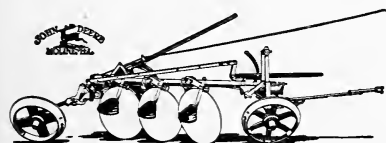
Net Cash Price \$121.60.



JOHN DEERE TRACTOR GRUB BREAKER

Is built to stand severe service. Twenty-inch bottom, cuts and turns difficult grub or bog land, any depth up to 10 inches. Share point is protected by being mortised into the heel of an extra heavy cutter. Price \$240.00.

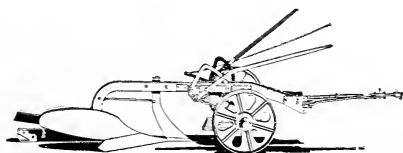
Net Cash Price \$228.00.



JOHN DEERE NO. 19 POWER LIFT LIGHT TRACTOR DISC PLOW

With 24" Discs and Universal Scrapers. Weight 2 discs 1107 lbs., 3 discs 1236 lbs.

Prices quoted on application.



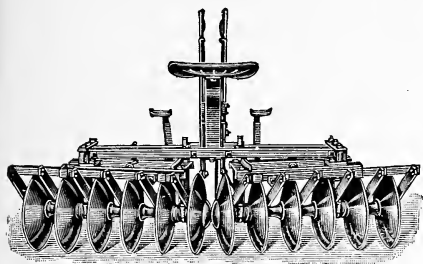


A fine crop of John Williams Seedleaf on farm of Daniel F. Broderick, South Windsor, Conn. Grown on our tobacco Fertilizers.



28 acres Broadleaf on farm of G. F. Stumpf, Burnside, Conn.
Grown on our tobacco Fertilizers.

Disc Harrows



OHIO — 12 - 16 Single Action

The construction of this Harrow is of the very best. It is all steel even the stub pole.

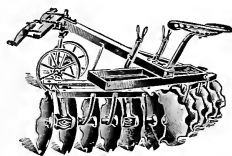
Price with Pole and 2 Horse Evener \$55.00. **Net Cash Price \$52.25**

Price with Foretruck and 2 Horse Evener \$64.00. **Net Cash Price \$60.80**

CLARK CUTAWAY Single Action

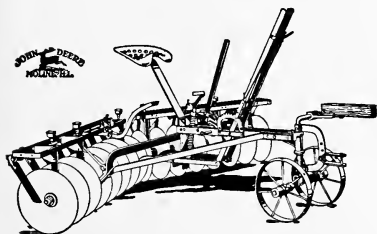
The Clark "Cutaway" single action harrow is reversible, that is, the gangs can be swung end for end, so that the soil may be thrown either out or in.

8-16" discs one horse with shafts Price \$42.30. **Net Cash Price \$40.20.** 12-16" discs with pole and 2 horse evener \$52.00. **Net Cash Price \$49.50.** 12-16" discs Price with foretruck, and 2 horse evener \$60.40. **Net Cash Price \$57.50.** Foretruck as an extra Price \$10.00. **Net Cash Price \$9.50.**



CLARK CUTAWAY Double Action

16-16" discs	4½ ft. cut,	2 Horse Evener	Price \$72.85	Net Cash Price \$69.20
20-16" "	5½ " "	3 " "	87.45	" " " 83.55
24-16" "	6½ " "	3 " "	94.50	" " " 89.80
24-16" "	6½ " "	4 " "	97.35	" " " 92.50



JOHN DEERE MODEL B.

Extremely flexible, penetrates, pulverizes and packs the soil its entire width. Each gang works independently — one gang can pass over obstructions without lifting the other from its work.

12-16" discs Price with Foretruck and 2 Horse Evener \$68.00. **Net Cash Price \$64.60.**

12-16" discs Price with Pole and 2 Horse Evener \$60.00. **Net Cash Price \$57.00.**

JOHN DEERE MODEL L FOR TRACTOR

Front and rear sections are angled by independent cranks convenient to tractor operator, without backing or stopping harrow. Automatic yielding lock coupling, an exclusive feature, compels rear discs to cut ridges left by front gangs.

24-16" discs 6 ft. cut, Price \$120.00.

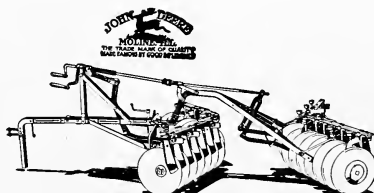
Net Cash Price \$114.00.

28-16" discs 7 ft. cut, Price \$130.00.

Net Cash Price \$123.50.

32-16" discs 8 ft. cut, Price \$140.00.

Net Cash Price \$133.00.



ACME

Pulverizing Harrows

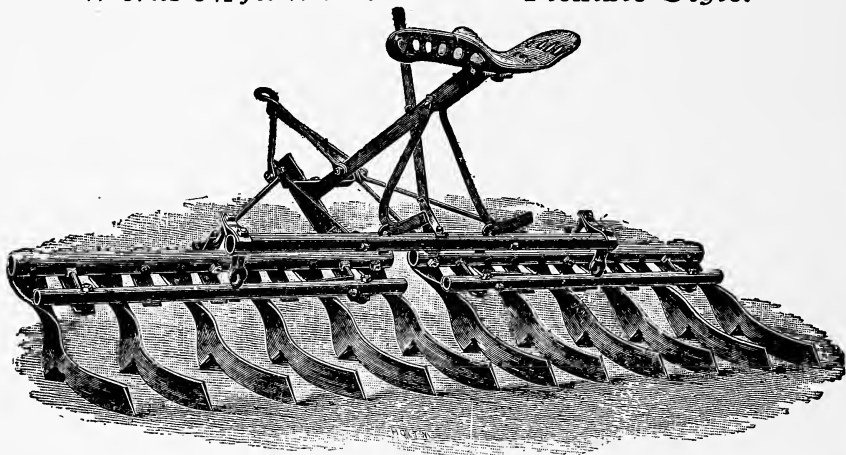
Warranty. I hereby warrant each and every part of each and every "Acme" Pulverizing Harrow against breakage for the term of one season after it leaves the manufactory or any of my storehouses, and I hereby authorize Agents and Dealers to FURNISH FREE NEW PARTS TO REPLACE BROKEN PARTS; the only stipulation being, that the farmer demanding such parts shall sign a statement that the breakage occurred in fair usage, which statement shall be countersigned by the Agent or Dealer from whom the Harrow was purchased.

DUANE H. NASH, Manufacturer.

No. 23

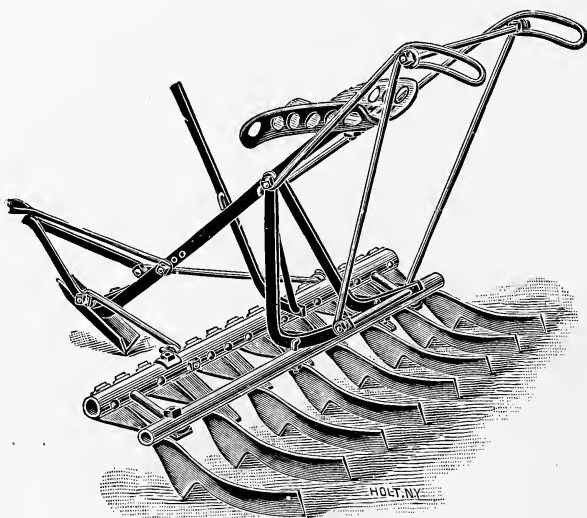
Two-Horse Size.
Works 6½ ft. Wide.

Riding Harrow.
Flexible Style.



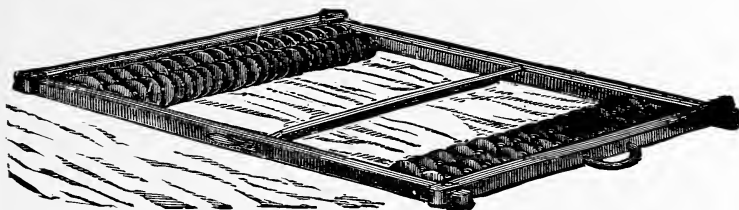
The gang bars may be made rigid, when desired by means of braces provided for that purpose.

Price of No. 26, (two horse size)	\$33.00	Net Cash Price	\$31.35
Price of No. 23, " " "	27.00	" " "	25.65



Price of Harrow (one-horse size) \$21.00 Net Cash Price \$19.95

Meeker Smoothing Harrow

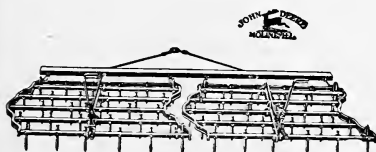


A perfect harrow and land roller combined. This harrow has become a great favorite among all classes of farmers and market gardeners.

It has four (4) sets of rollers containing 58 steel discs. These discs grind all lumps and save the work of raking and also mash small stones below the surface better than any field roller, leaving the land smooth and level.

6ft. with 10 inch discs Price \$40.00 Net Cash Price **\$38.00**
 8ft. (for tractor) " " " " " 50.00 " " " **47.50**

Universal Steel Lever Harrow



Deere — 60 Tooth Price \$26.00. Net
 Cash Price **\$24.70.**

Deere — 30 Tooth Price \$14.00. Net
 Cash Price **\$13.30.**

Ohio — 60 Tooth Price \$24.00. Net
 Cash Price **\$22.80.**

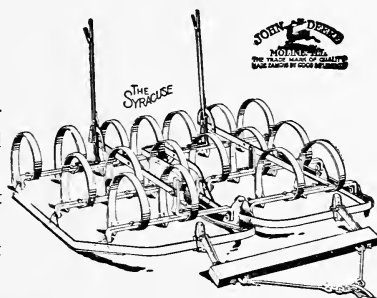
Ohio — 30 Tooth Price \$13.00. Net
 Cash Price **\$12.15.**

Syracuse Spring Tooth Harrow

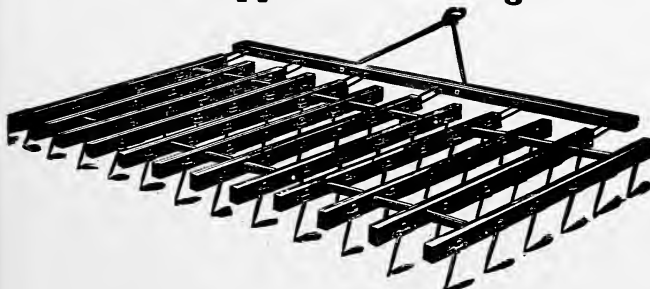
This harrow is particularly adapted for work in sandy, gravelly or stony ground where deep cultivation is required.

10 Tooth (one horse) Price \$17.00. Net
 Cash Price **\$16.15.**

17 Tooth (two section) Price \$32.00. Net
 Cash Price **\$30.40.**



Clipper Smoothing Harrow



One Section
 Price \$12.50
 Net Cash
 Price **\$11.90**

Two Section
 Price \$22.00
 Net Cash
 Price **\$20.90**

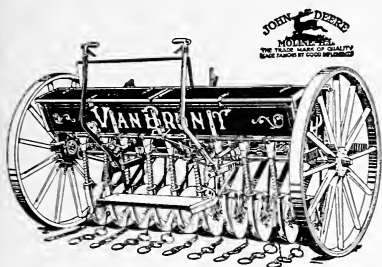
Three Section
 Price \$33.00
 Net Cash
 Price **\$31.35**



Fifteen acres Broadleaf on farm of Frank Sedlacek, Manchester, Conn.
Grown on our Fertilizers.



A fine crop of Broadleaf on farm of Henry P. Brewer, Hillstown.
Grown on our Complete Tobacco Fertilizer.



John Deere-Van Brunt Disc Fertilizer Drill With Grass Seed Attachment

Distributes any standard fertilizer and plants grain at the same time — also grass seed, when attachment is used; or it will handle any one of the three alone. All feeds can be thrown out of gear and discs used for stirring soil without seeding or fertilizing. Each wheel drives half the feeds, insuring positive and steady operation. One-half of grain feeds can be used for finishing a field or seeding narrow places. Van Brunt Ad-

justable Gate Force-Feed is one of the best seeding devices made. Drill handles fertilizer in quantities from 65 to 1250 pounds per acre. Plants wheat, oats, barley, flax, rye, rice, alfalfa, peas, beans, corn, etc.

Size 11 x 7 furnished regularly with 1-pole and 2-horse evener.

Price complete with grass seed attachment \$185.00 Net Cash Price \$175.75

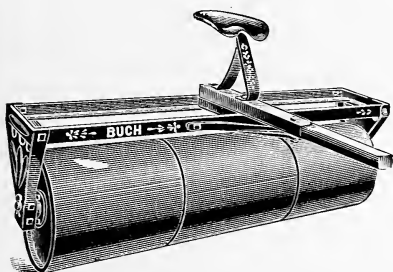
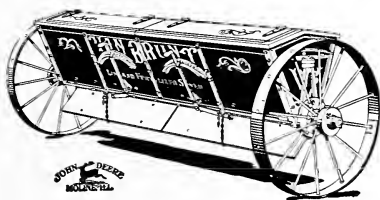
John Deere-Van Brunt Lime and Fertilizer Sower

Covers 8 feet of ground; carrying capacity 10 bu. Direct wheel drive — each wheel drives half the machine.

Price with Agitator \$92.00. Net Cash Price \$87.40.

Price less Agitator \$85.00. Net Cash Price \$80.75.

If neckyoke and doubletrees are wanted add \$4.00.



Buchs Steel Land Roller

The drums are heavy steel sheets not easily dented. The ends are closed to keep out dirt and trash. The frames are heavy angle steel securely bolted. Price \$50.00. Net Cash Price \$47.50

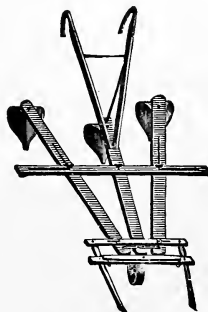
Goslee Improved Field Marker

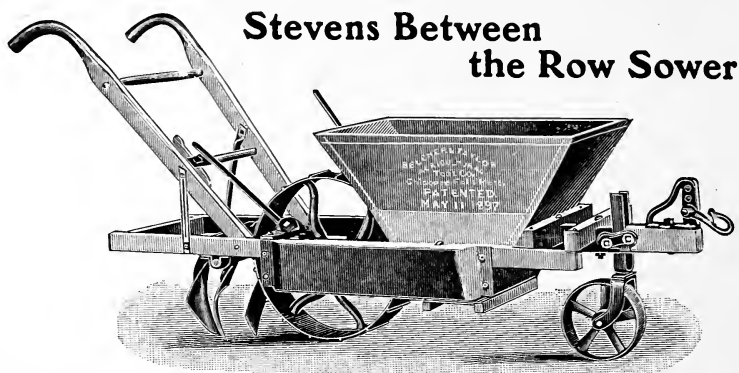
(Spread 2 to 4 feet)

This machine is designed to mark out rows any width for any crops grown in rows. Teeth are adjustable to any size and depth drill.

Price plain \$19.00. Net Cash Price \$18.00

" with spacer bar \$20.50. Net Cash Price \$19.50





Stevens Between the Row Sower

For sowing fertilizers between rows or for doing other surface work, as some tobacco growers claim that a part of the fertilizing should be done after the first hoeing. The machine is made with wheel inside the frame, and covers a space of 12 inches wide with fertilizer. It has three cultivator teeth, adjustably attached to back end of machine for covering. Price, \$32.00. Net Cash Price \$30.40.

Stevens Broadcast Fertilizer Sower

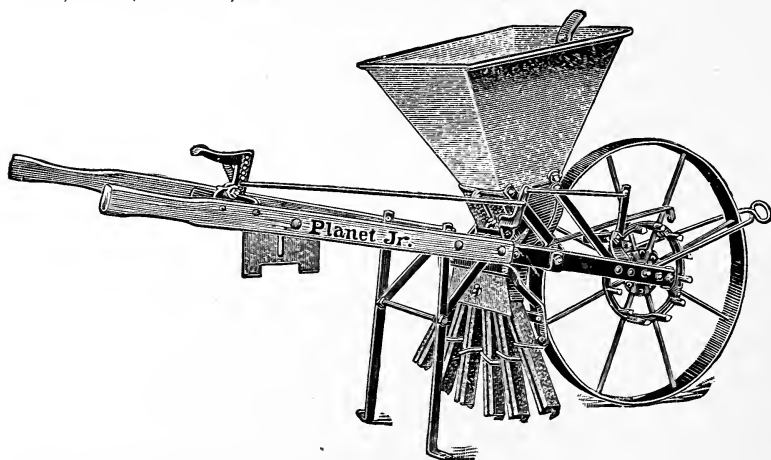
We have in stock a few 8 ft. 3 in., two horse size. Price on application.

Superior Broadcast Fertilizer Sower

Price, 5 ft. (one horse) with agitator \$80.00. Net Cash Price \$76.00.

Nonpareil Broadcast Fertilizer Sower

Price, 8 ft. (two horse) \$65.00. Net Cash Price \$61.75.



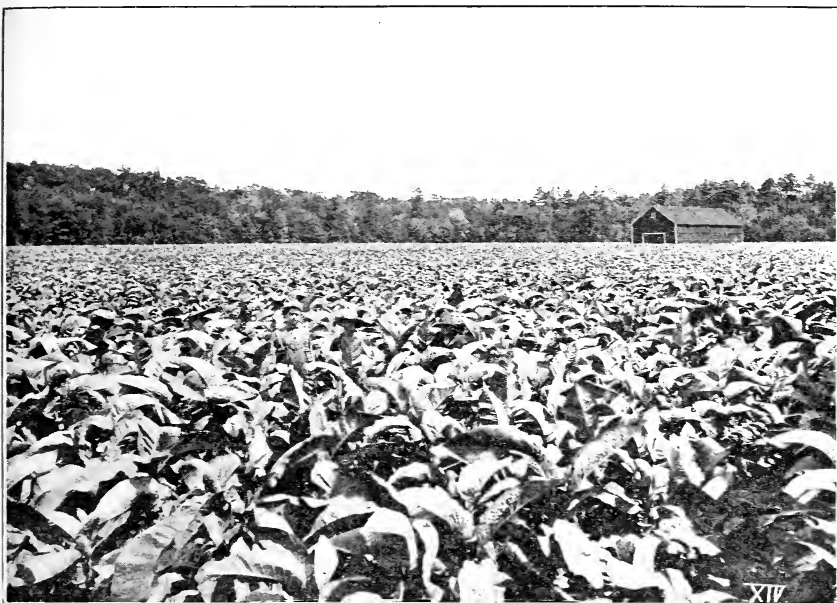
Planet Jr. No. 220 Fertilizer Distributor will distribute fertilizer in the middles of three rows 12 to 14 inches apart; it will side-dress one side each of two rows up to 36 inches apart (one complete row; and corn in wider rows). You can use it in very narrow rows — as close as 9 inches.

The No. 220 spreads fertilizer from 4 to 30 inches on the ground. The hopper capacity is one bushel and the weight of the load is placed over the wheel, making it easy to push. The No. 220 will distribute **100 to 2,000 pounds of commercial fertilizer to the acre**. Quantity per acre is regulated by a notched index on the right hand handle. The shut-off rod is operated from the same point. Price, \$27.00. Net Cash Price, \$25.65.

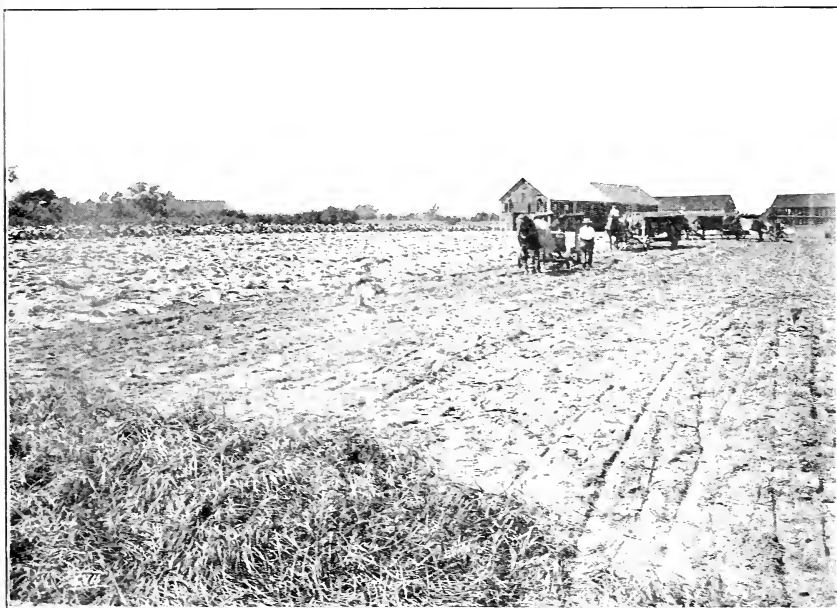
No. 21 McWhorter Wheelbarrow Sower

A very popular machine for sowing fertilizer between the rows.

Price \$22.00. Net Cash Price \$19.90



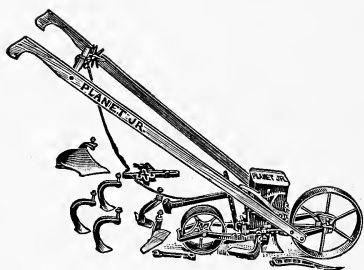
80 acres of Broadleaf on farm of J. E. Lathrop, of South Windsor.
Grown on our Fertilizers.



Harvesting forty acres Seedleaf on farm of J. W. Dunne, East Windsor.
A fine crop grown on our tobacco Fertilizer.

Farm and Garden Implements

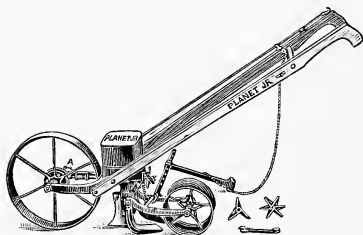
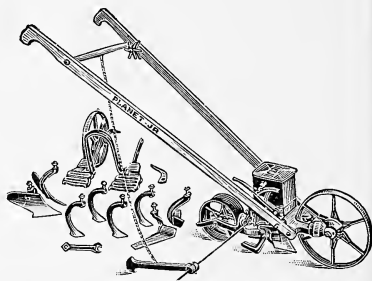
Planet Jr.



No. 4 Planet Jr. Combined Hill and Drill Seeder, Single Wheel Hoe, Cultivator and Plow. Very popular with owners of small gardens. Price \$18.00. Net Cash Price \$17.10.

No. 4D (seeder only) Price \$14.25
Net Cash Price \$13.55.

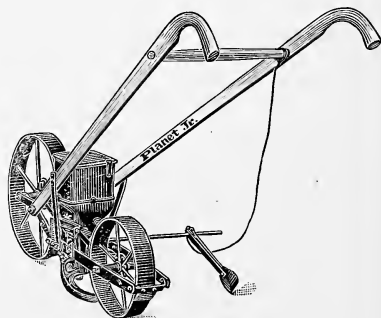
No. 25 Planet Jr. Combined Hill and Drill Seeder, Double and Single Wheel Hoe, Cultivator and Plow. Has long been known as the "Complete Gardener" Price \$21.50. Net Cash Price \$20.45.

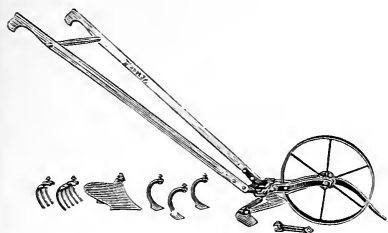


No. 3 Planet Jr. Hill and Drill Seeder. For Market Gardeners, Onion Raisers and other large growers. Holds 3 qts. Price \$17.50. Net Cash Price \$16.60.

"A NEW DRILL SEEDER FOR ALL SOILS"

No. 26 Planet Jr. Drill Seeder is constructed almost entirely of steel, is substantial, and will give a great many years of satisfactory service. Price \$20.00. Net Cash Price \$19.00.





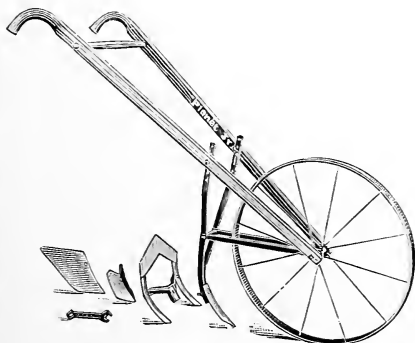
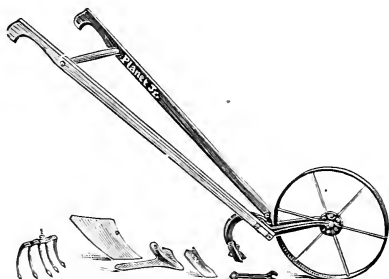
No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow. Equipment (as shown): One pair of 6" hoes, three cultivator teeth, one garden plow, one 7" rake, one 4" rake, one leaf guard. Price \$9.00. Net Cash Price \$8.55.

No. 17 Planet Jr. Single Wheel Hoe. Equipment — one pair of 6 inch hoes, three steel cultivator teeth, one garden plow. Price \$7.75. Net Cash Price \$7.35.

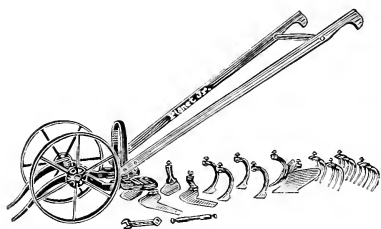
No. 17½ Planet Jr. Single Wheel Hoe. Equipment — one pair of 6 inch hoes and three steel cultivator teeth. Price \$6.75. Net Cash Price \$6.40.

No. 18 Planet Jr. Single Wheel Hoe. Equipment — one pair of 6 inch hoes. Price \$5.75. Net Cash Price \$5.45.

No. 19 Planet Jr. Garden Plow and Cultivator. Equipment (as shown): One 2" cultivating tooth, one 10" sweep, one plow, one 5 prong cultivating attachment. Price \$6.00. Net Cash Price \$5.70.



No. 119 Planet Jr. High-Wheel Garden Plow and Cultivator. Has a wheel with $\frac{3}{16}$ " x $\frac{3}{8}$ " steel spokes, very strong, twenty-four inches in diameter nearly twice as high as the No. 19, making an easy running tool for any garden work but particularly where such crops as potatoes, corn, field beans or anything in wide rows must be cared for by hand rather than with a horse. Price \$4.50. Net Cash Price \$4.25.

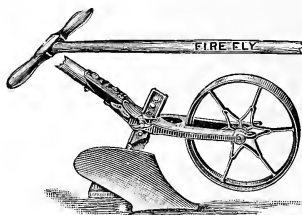


No. 11 Planet Jr. Double and Single Wheel Hoe Combined. Equipment (as shown): One pair 6" hoes, one pair 4½" hoes, four steel cultivator teeth, one pair plows, two three tooth rakes, two five tooth rakes, two leaf lifters. Price \$13.75. **Net Cash Price \$13.00.**

No. 12 Planet Jr. Double and Single Wheel Hoe Combined. Equipment — one pair 6 inch hoes, four steel cultivator teeth, one pair plows, two leaf lifters. Price \$10.75. **Net Cash Price \$10.20.**

No. 13 Planet Jr. Double and Single Wheel Hoe Combined. Equipment — one pair 6 inch hoes. Price \$8.00. **Net Cash Price \$7.60.**

Planet Jr. Fire Fly Garden Plow. This substantial tool makes a splendid companion to any wheel hoe. It plows a furrow four to six inches wide and up to three inches deep or deeper by going a second time. Price \$4.25. **Net Cash Price \$4.00.**

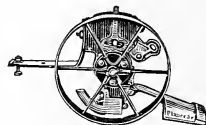


Planet Jr. Star Pulverizer, Leveler and Weeder. This tool as its name implies, can be used both for pulverizing the seed bed in preparation for planting; and also for keeping down weeds after crops are up. The revolving star-shaped discs have a large cutting surface. Width of cut, 7½ in. Price \$3.25. **Net Cash Price \$3.10.**

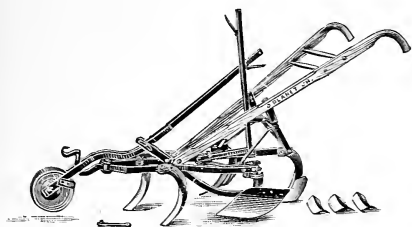
Width of cut, 14 in. Price \$6.00. **Net Cash Price \$5.70.**



No. 35 Planet Jr. Seeder Attachment for Wheel Hoes and Garden Plows. Sows practically all vegetable seeds in straight even rows, at the right depth, and covers them accurately as our standard size seeders. Price \$6.50. **Net Cash Price \$6.20.**



No. 2 Planet Jr. Lawn Edger. **Net Cash Price \$1.75.**

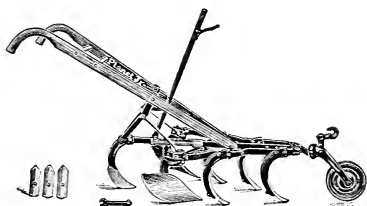


No. 8 Planet Jr. Horse Hoe and Cultivator. Equipment (as shown): Four 3 x 8 in. cultivator steels, one 4 x 8 in. cultivator steel, two 6 in. hillers, one 7 in. shovel, lever wheel, lever expander and depth regulator. Price \$16.25. **Net Cash Price \$15.45.**

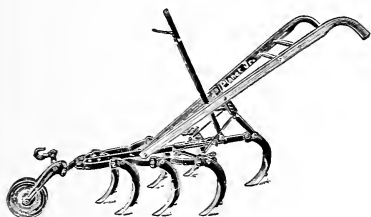
No. 7 Planet Jr. Horse Hoe — Same as No. 8 but has no depth regulator. Price \$15.75. **Net Cash Price \$15.00.**

No. 9 Planet Jr. Horse Hoe — Identical with No. 8 except that it has a plain wheel instead of a lever wheel; and is without depth regulator. Price \$14.25. **Net Cash Price \$13.55.**

No. 82 Planet Jr. Horse Hoe and Cultivator Combined. Equipment (as shown): Seven 2¼ x 8 in. cultivator steels, one pair 6 in. hillers, one 7 in. shovel steel, lever expander. Price \$15.75. **Net Cash Price \$15.00.**



No. 82 Planet Jr. Horse Hoe and Cultivator Combined with Lever Wheel. Price \$18.00. **Net Cash Price \$17.10.**



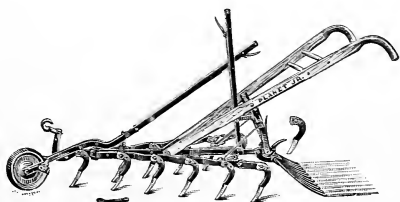
No. 83 Planet Jr. Seven Tooth Plain Cultivator. Equipment (as shown): Seven 2¼ x 8 in. cultivator steels, lever expander. Is the most profitable one-horse cultivator to use. The seven teeth make possible finer cultivation than can be had with a five-tooth cultivator. Price \$14.25. **Net Cash Price \$13.55.**

No. 83 Planet Jr. Seven Tooth Plain Cultivator with Lever Wheel. Price \$16.50. **Net Cash Price \$15.70.**

No. 90 Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer (as shown). Price \$17.00. **Net Cash Price \$16.15.**

No. 90B. Less Pulverizer. Price \$13.75. **Net Cash Price \$13.10.**

No. 90D. Less Pulverizer and wheel. Price \$10.75. **Net Cash Price \$10.25.**





No. 20D. Hand Fertilizer Drill sows accurately from 100 to 1,000 lbs. per acre. Will handle any material in any reasonable condition, without clogging.
Price \$27.00. **Net Cash Price \$25.65.**

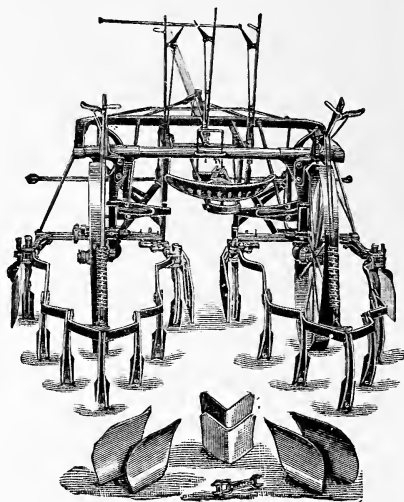
No. 20. Combined Fertilizer Drill, Pea and Bean Planter.
Price \$32.00. **Net Cash Price \$30.40.**

Planet Jr. Double Celery Hiller — The greatest labor saver for celery-growers ever invented. Price \$27.50. **Net Cash Price \$26.10.**

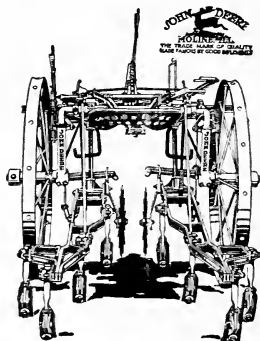
Planet Jr. Pivot Wheel Cultivator

The No. 72 as shown has five levers, and they simplify its control so that a boy can operate it with success. The center lever adjusts the hinged tongue regulating the depth of the front teeth and leveling up the machine to suit all heights of neck yoke. The outside levers regulate the depth of the teeth in the rear, while intermediate levers are used in changing the widths of the gangs to suit irregular planting without stopping the team. Price \$100.00. **Net Cash Price \$95.00.**

No. 70D Plain \$70.00 **Net Cash Price \$66.50**



John Deere K. C. Cultivator



Put your boy in the field on the K. C. He will like its operation; you will like the results. Every adjustment made quickly and accurately from the seat with handy levers. Lower the rigs with the master lever: shovels penetrate level. Space them with spread lever; then spread equally at front and back, shovels always point straight ahead and cut out full width — no weeds "get by".

K. C. 76-8 Shovel, Pin Break. Price \$67.00. **Net Cash Price \$63.65.**

K. C. 156-8 Shovel, Spring Trip. Price \$74.00. **Net Cash Price \$70.30.**

Tobacco attachment for above Price \$12.00. **Net Cash Price \$11.60.**

Rotary Shields (as shown) in place of solids, add \$3.00.

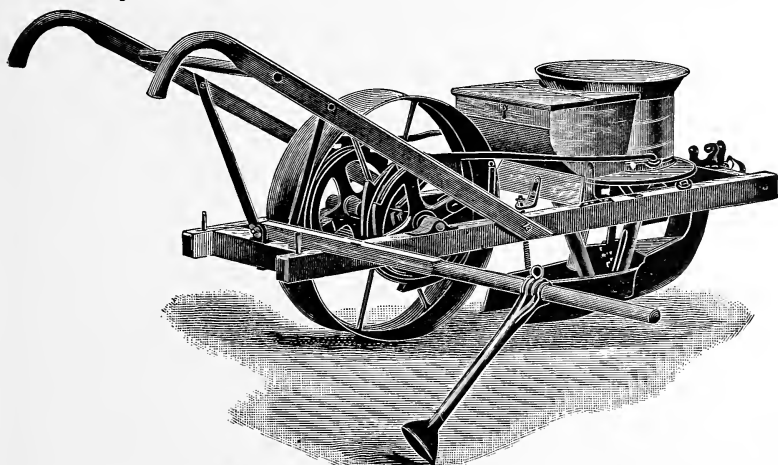


Crop of 30 acres Broadleaf tobacco on farm of Annie Kopczunos, Wapping.
Grown on our Blue Label Fertilizer, a very fine crop.



Twelve acres of Broadleaf on farm of John Yellern, Glastonbury.
Grown on our Fertilizers.

"KING OF THE CORNFIELD"

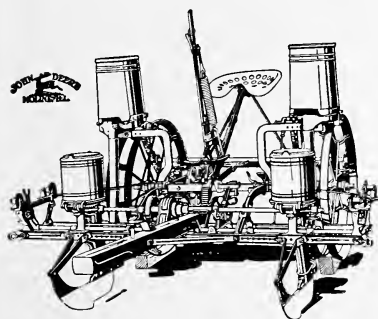


Corn, Bean and Pea Planter and Fertilizer Distributor

Every machine is warranted to be well made of good material, and guaranteed to do its work perfectly and satisfactorily with the different kinds of seeds, as we claim, if used according to directions.

Price \$45.00 Net Cash Price \$42.75

JOHN DEERE No. 999 CORN PLANTER

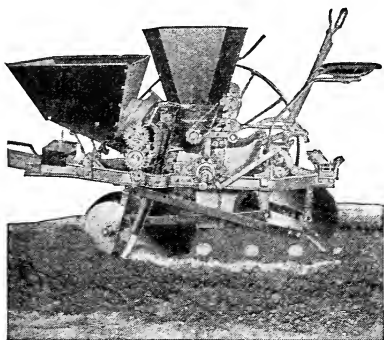


Widely recognized as the most accurate planter on the market. The John Deere Natural Cell-Fill, Edge-delivery seed plates, sloping hopper bottom, improved metal cut-off and knocker insure positive feed and unfailing accuracy. Plants accurately whether the hopper is full or nearly empty. Seed plates for handling every kind of corn; also beans, and many other seeds. Variable drop plants two, three or four kernels in each hill as desired. The number of kernels per hill can be varied merely by shifting foot lever, without stopping the machine. Also varies the distance in drilling. Easy to

change from hilling to drilling. Underhung reel; a touch of the toe releases check wire, fertilizer can be checked with each hill or drilled along the row.

Price plain less check row and fertilizer attach.	Price \$ 75.00	Net Cash Price \$71.25
Price with fertilizer attach. less check row	" 105.00	" " " 99.75
Price with fertilizer attach. and check row	" 115.00	" " " 109.25
Automatic hilling attachment		" " " 4.00

POTATO PLANTERS



Hoover Visible With Automatic Seed Control. With the operator on the seat at the rear the whole planting operation is before him. This enables him to make certain that each picker is working properly, thus assuring perfect planting.

Hoover No. 400 Plain, less eveners. Price \$112.50. **Net Cash Price \$107.00.**

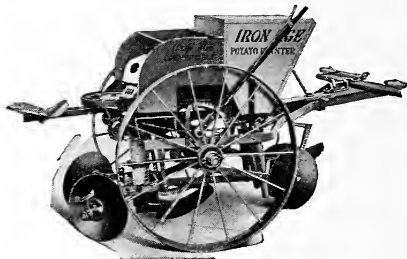
Hoover No. 400 with No. 402 fertilizer attachment, less eveners. Price \$145.00. **Net Cash Price \$137.75.**

IRON AGE—Two Man, Assisted Feed

For many years it has been conceded that in its ground performance the Iron Age Planter exhibits the highest degree of perfection ever attained. By Iron Age ground performance is meant the opening of furrow, distributing of fertilizer, placing of the seed safely out of touch of the fertilizer and finally ideal covering and ridging. Equipped for large seed.

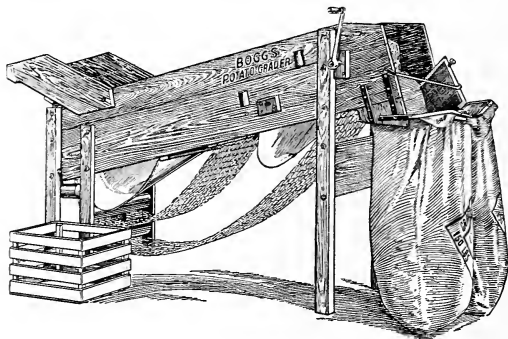
Iron Age No. 404 (without Fertilizer attachment) Price \$130.00. **Net Cash Price \$123.50.**

Iron Age No. 404R (with Fertilizer attachment) Price \$155.00. **Net Cash Price \$147.25.**



HOOVER POTATO CUTTER

This cutter meets the general demand for a first-class potato cutter. Provision is made to cut either large or small potatoes into the proper number of pieces. Price \$19.50. **Net Cash Price \$18.50.**



BOGGS STANDARD HAND POTATO GRADER

Boggs No. 3 machine permits long or round potatoes to be sorted and graded into No. 1 and No. 2 sizes with less than 3% variation in size from government grades, and cleans them of all dirt, trash and culls in one operation. No. 3 hand grader as illustrated has a capacity of 150 bushels per hour.

Net Cash Price \$65.00

When large quantities of potatoes are to be graded, the power equipments will be found most advantageous. They not only have much greater capacity than the hand machine, but effect a big labor saving. Prices on application.

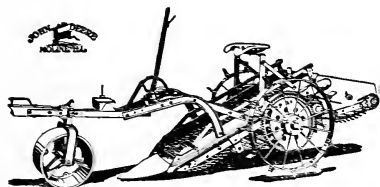
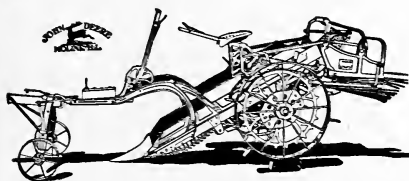
Potato Diggers

The "Hoover" Potato Diggers are made with rod type elevator, 6 and 7 foot frame, in 20, 22 or 24 inch widths, with chain, gear or engine drive, with agitating vine separating rear rack or extension elevator. All diggers can be furnished with either the Two-wheel (Double Action) or Single Roller Front Truck. The 6 foot digger has 30 inch and the 7 foot 36 inch drive wheels with an extreme tread of 41 inches on the 22 inch chain drive and 39 inches on the 22 inch gear drive diggers and are practically of all steel construction.

No. 1522K gear driven with 5½ ft. 22 in. rod elevator and 3 ft. extension elevator built for the farmer with a small acreage.

Price with 2 Horse Evener and 2 wheel front truck \$120.00. **Net Cash Price \$114.00.**

With single front truck as shown add \$2.00.



No. 622A chain driven with 6 ft. 22 in. rod elevator and vine separating rear rack.

Price with 2 Horse Evener and 2 wheel front truck \$145.00. **Net Cash Price \$137.75.**

With 4 Horse Evener add \$3.00.

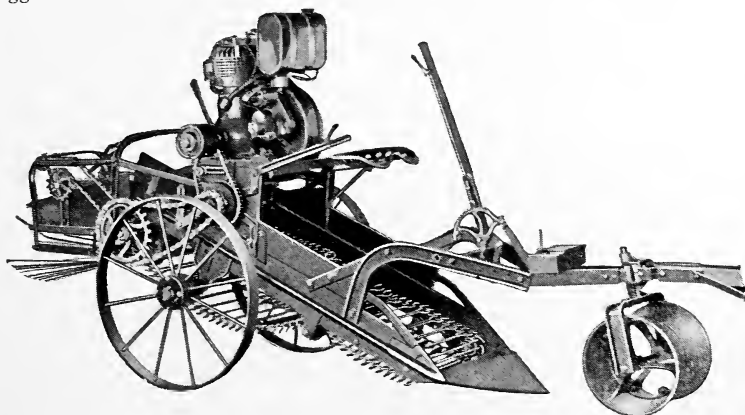
With single front truck add \$2.00.

The engine drive potato digger is the adaptation of the modern light-weight gasoline engine to the driving of the mechanism of the elevator potato digger.

The engine is mounted on the main frame of the potato digger and transmits the power to the main elevator shaft.

From the driver's seat, the operator controls the friction clutch lever, also the speed of the engine for varying conditions of digging.

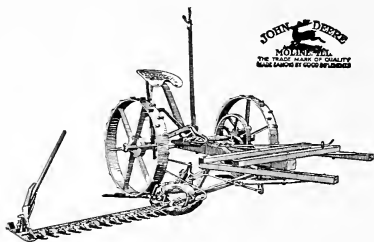
The clutch sprocket automatically releases if stone or other hard substance should become clogged in the digger. This eliminates all possibility of damage to the engine or digger.



No. 4724A chain driven with 7 ft. 24 in. rod elevator, vine separating rear rack, and 5 Horse Power New Way Engine.

Price with 2 Horse Evener 2 wheel front truck \$390.00. **Net Cash Price \$370.50.**

With single front truck as shown add \$2.00.

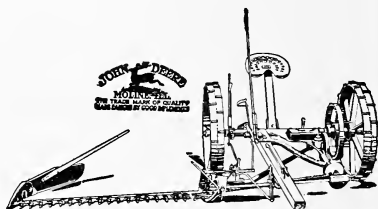


John Deere One Horse Mower

3½ ft. Cut. Price \$87.00

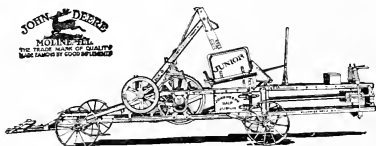
Net Cash Price \$82.65

John Deere High Lift Mower



An extremely simple mower with a high, easy lift. Bar raised with foot lift amply high to pass over ordinary obstructions, with hand lift bar raised extremely high. A boy can operate it. Special arrangement of simple driving gears prevents side strain and undue wear on bearings. Maximum power delivered to carefully-made and accurately-fitted knife. Location of pinion on crank shaft prevents end thrust. Bar attached to wide yoke insures instant starting. Cutter bar floats and has great flexibility. All adjustments and repairs quickly and easily made with ordinary tools.

Regular 5 ft. Cut	Price \$89.00	Net Cash Price \$84.50
Giant truck 5 ft. Cut	" 93.00	" " " 88.35
Giant truck 6 ft. Cut	" 95.00	" " " 90.25



John Deere Junior Motor Press

A light weight outfit for individual use. Size 14 x 18: Capacity 1 to 2 tons per hour.

Price \$458.00 Net Cash Price \$435.10

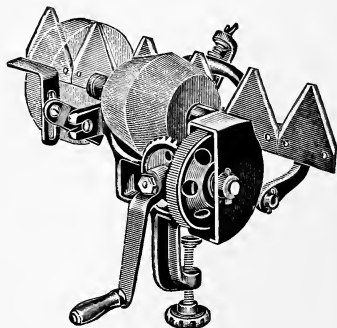
Modern Grinder (as shown)

For mower knives and general tool grinding fast cutter and easy to operate.

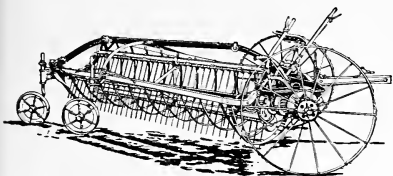
Net Cash Price \$6.50

Royal Grinder

Net Cash Price \$8.50



John Deere-Dain Combination Rake



Price \$130.00

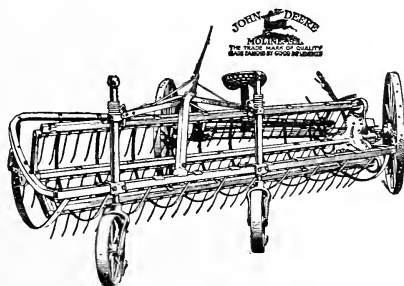
For the man who desires a combination rake, this machine will do satisfactory work. Moving one lever changes machine from rake to tedder. Angle of teeth easily changed, and either end of reel raised or lowered independently. Has ample clearance for heavy hay or large windrows. Left-hand wheel can be set in for turning windrows.

Net Cash Price \$123.50

John Deere-Dain System Rake For Air-Curing Hay

This rake aids the hay-grower in producing hay that brings the highest market price. Air cures hay without loss of color, foliage or feeding value when used according to the John Deere-Dain System of Air-Curing Hay. Rake follows mower while leaves are still active and lays the hay in loose, fluffy windrows, leaves inside, butts out. The foliage thus protected cures properly, does not get brittle and break off. Inclined frame gives greater capacity as volume of hay increases. Curved teeth lift hay gently — no dragging or threshing. All adjustments are made from the seat.

Price \$125.00



Net Cash Price \$118.75

John Deere Single-Cylinder Windrow Hay Loader

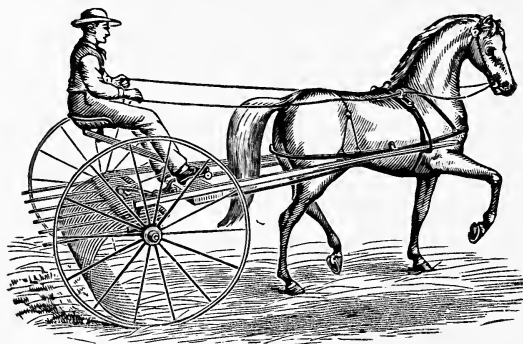


Very light draft and minimum number of working parts. Single drum mounted directly on the axle. Hinged carrier makes loading easy in windy weather. Furnished regularly with forecarriage — no lifting is necessary when coupling to wagon. Extra strong, well braced frame with hot-riveted corner plates. Gets all the hay when properly raked into windrows. Handles alfalfa and clover without knocking off valuable foliage parts. Capacity ample for all side-rake windrows. Made in 6 foot width with forecarriage.

Price \$130.00

Net Cash Price \$123.50

WOOD HAY RAKES



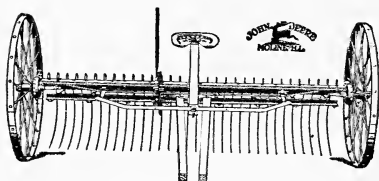
Wiard 8 ft. Price \$46.00

Net Cash Price 43.70

Yankee 8 ft. Price 50.00

Net Cash Price 47.50

New John Deere — Steel Sulky Rake

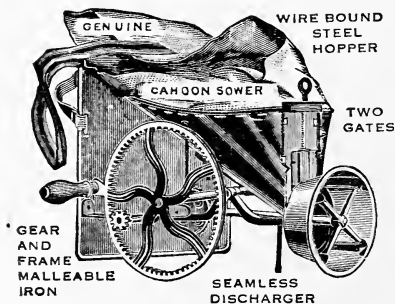


The rake that gives years of service. Wheels interchangeable, and dump rods reversible, giving extra wear without repair expense. Price 8 foot, 24 Tooth with end guard teeth \$46.00. **Net Cash Price \$43.70.** Price 9 foot, 28 Tooth with end guard teeth \$49.00. **Net Cash Price \$46.50.**

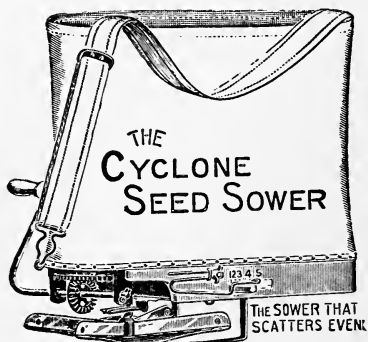
Thompson Wheelbarrow Seed Sower

Sows timothy, clover, alsike, alfalfa, millet, turnip and various other seeds. Price 14 ft. \$14.50. **Net Cash Price \$13.75.** Price 16 ft. \$15.00. **Net Cash Price \$14.25.**

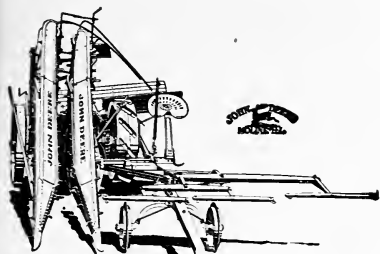
Grain box for above \$7.50 Net.



Price \$5.00 Net.



Price \$2.75 Net.



John Deere Corn Binder

This binder is unusually easy to operate. By merely pressing foot-trip lever, power carrier delivers bundles free of horses' path and practically at right angles to standing corn. All steel quick turn Tongue Truck takes neck weight from horses and also makes it easy turning. Stiff pole and tractor hitches can be furnished.

Price with Pole less Power Bundle Carrier \$230.00. Net Cash Price \$218.50.

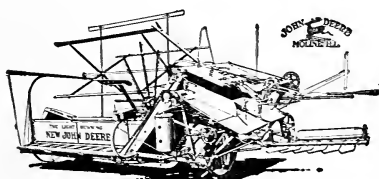
Price with Pole and Power Bundle Carrier \$245.00. Net Cash Price \$232.75.

Price with Tongue Truck less Power Bundle Carrier \$250.00. Net Cash Price \$237.50.

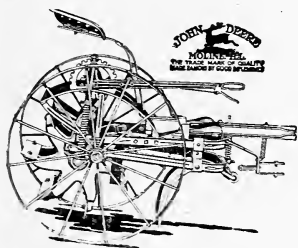
Price with Tongue Truck with Power Bundle Carrier \$265.00. Net Cash Price \$251.75.

John Deere Grain Binder

Main frame is extra strong. Bars are widely overlapped and hot-riveted together. Into forged-in-frame bearing supports are fitted self-aligning bearings which cannot get out of line.



Price with Bundle Carrier and Transport Truck \$245.00. Net Cash Price \$232.75.



Stalk Cutters

John Deere 7 Knife. Price \$57.00. Net Cash Price \$54.15.

John Deere 9 Knife. Price \$60.00. Net Cash Price \$57.00.

Ohio 7 Knife. Price \$51.50. Net Cash Price \$48.95.

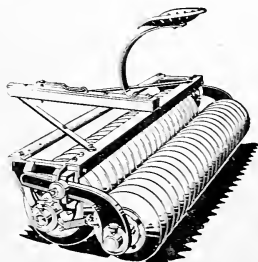
Ohio 9 Knife. Price \$54.00. Net Cash Price \$51.30.

If neckyoke and evener not wanted deduct \$3.00.

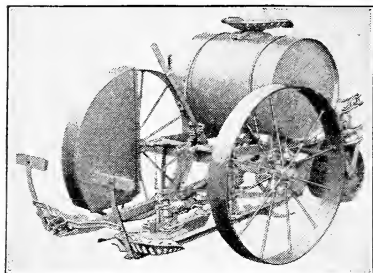
Brillion Pulverizer

The new roller-bearing light draft Brillion Pulverizer consists of two gangs — the front gang with sections 15 inches in diameter and 4 inches wide; the rear gang 12 inches diameter and 4 inches wide with $\frac{3}{8}$ -inch concave. It is by far the most popular soil pulverizer and packing machine made. You will note by the end bracket that it consists of two castings assembled with a large bolt and a 150-pound pressure spring for additional pressure on rear gang. These brackets have openings to receive the roller-bearing boxes, which permits this boxing to be self-aligning and to endure all kinds of soil without excess of wear or draft.

Prices on Application



New Improved Tiger Transplanter



The lifting lever works on an eccentric. A child can lift the weight of two men and when the lever is operated it automatically throws machine out of gear.

Simply and strongly made with these new improvements this machine is rapidly coming into favor with discriminating buyers. This machine has $1\frac{1}{4}$ inch water connections. The flow of water is under perfect control and can be regulated to deposit as small a quantity as desired, or to discharge one pint to each plant.

Price \$105.00.

Net Cash Price \$99.75

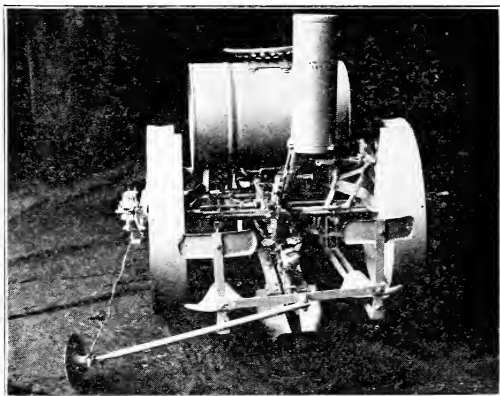
Bemis Transplanter

Thirty-five years of practical experience is embodied in the Bemis.

Nearly every tobacco farm in the Conn. Valley is equipped with one or more of these implements.

Price with fertilizer attachment as shown \$125.00. Net Cash Price \$118.75.

Price less fertilizer attachment \$105.00. Net Cash Price \$99.75. Equipped with double truck \$2.00 extra.



Farquhar Success Jr. Potato Digger

The most popular plow-type digger on the market. Just the digger for the small grower—in fact no farmer can afford to be without this digger even if he raises only sufficient potatoes for his own consumption. In time and labor saving it pays for itself the first season. Price \$17.00. Net Cash Price \$16.15.



Hitchcock Potato Digger. Price \$12.00. Net Cash Price \$11.40.



Fine field of Havana tobacco on farm of Dickinson & Day, Hatfield, Mass., grown on Olds & Whipple fertilizer.

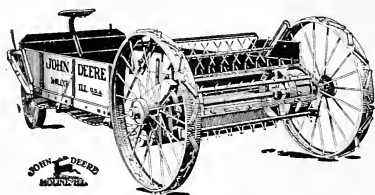


Farm of Mullins Bros., Hatfield, Mass. growers of Havana. Long time customers of Olds & Whipple, Inc.



Field of Havana on farm of Fitzgerald Bros., Hatfield, Mass. Fitzgerald Bros. have used our fertilizers for many years.

The Old Reliable John Deere Manure Spreader



In 1911 came the greatest change ever made in spreader design—the invention of the John Deere Spreader—the spreader with the beater on the axle; a machine that combined a low easy loading box with high drive wheels. This still is the preferred spreader on thousands of farms.

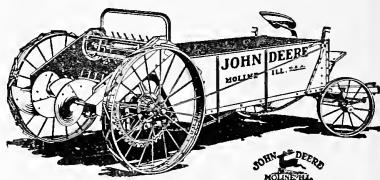
John Deere Size "A" 30 Bushel with 2 Horse Hitch Price \$182.50. **Net Cash Price \$173.00**

John Deere Size "B" 40 Bushel with 2 Horse Hitch Price \$185.00. **Net Cash Price \$175.00.**

John Deere Size "C" 50 Bushel with 3 Horse Hitch Price \$195.00. **Net Cash Price \$185.00.**

The New John Deere Manure Spreader

Narrow Type—Tight Bottom with Wide Spread Attachment. The low down spreader with the beater on the axle and the box-roll turn. Because of these features, it is not necessary to set the rear axle underneath or cut the front wheels under the box therefore the New John Deere is easy to load from the front to the rear without pitching the manure over the rear wheels.

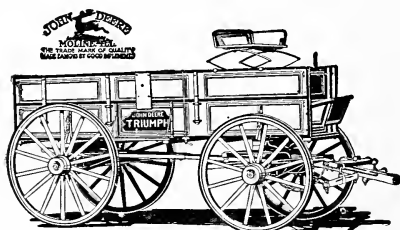


(See this new spreader set up on our showroom floor)

New John Deere Model "D" Spreader with 2 Horse Hitch and End Gate \$185.00. **Net Cash Price \$175.00.**

New John Deere Model "D" Spreader with 2 Horse Hitch less End Gate \$180.00. **Net Cash Price \$171.00.**

John Deere Triumph Wagon



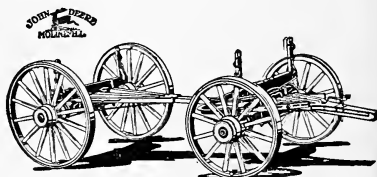
An attractive light-running wagon of moderate price having many of the features to be found on the more expensive John Deere wagons, among them the sand- and dust-proof skeins and malleable fifth-wheel bolster plate with corrugated coupling. Clipped gears; square wood front hounds of straight-grained oak; wheels are built strong of high grade material; hubs are oak or No. 1 black birch; oak or hickory spokes; box is firmly braced and strengthened with cross cleats and straps.

Prices on application.

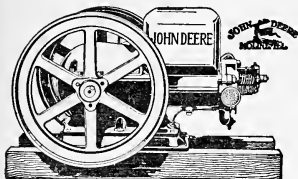
John Deere Farm Truck

In price, strength, draft and finish, John Deere farm trucks give exceptional satisfaction. They stand hard usage year after year because they are built right and in a factory that has an established reputation for making only the best.

Prices on application.



John Deere Type E Farm Engines

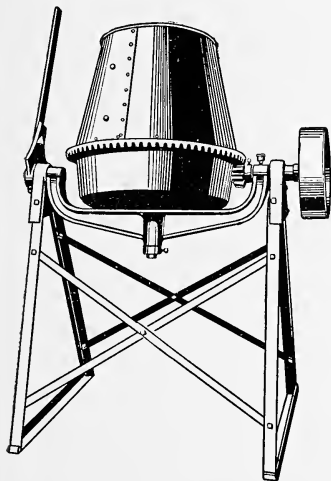
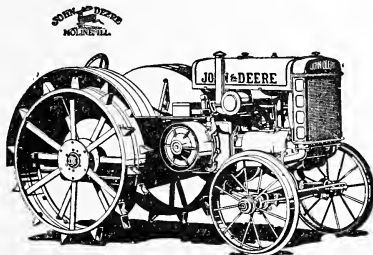


Contain the greatest improvements in engine building made in years. All important working parts fully enclosed in dust-proof case are oiled automatically. Magneto equipped.

1½ Horse Power Engine Price \$70.00. Net Cash Price \$66.50. 3 Horse Power Engine Price \$110.00. Net Cash Price \$104.50. 6 Horse Power Engine. Price \$178.50. Net Cash Price \$169.60.

JOHN DEERE MODEL D 15-27 FARM TRACTOR

Ideal power for field, orchard and belt work. Unusually compact, only 56 in. high, 63½ in. wide and 109 in. long, easy to handle. Simple, two-cylinder, low speed, kerosene-burning engine. Weight 3882 lbs. Price F. O. B. Waterloo, Ia., \$1,115.00.



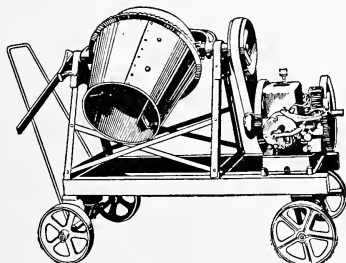
THE JUMBO CONCRETE MIXER

Capacity from 27 to 45 cubic yards of well mixed concrete a day. Have you ever figured out just how much time and money a good concrete mixer would save you.

A Jumbo, for example, with a squad of four men will do the work of 8 to 10 at hand mixing, which means a saving of at least \$15 a day — and a better mix can be obtained. Can be operated by hand or engine. Net Cash Price \$30.00.

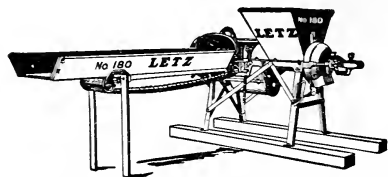
THE JUMBO CONCRETE MIXER Mounted on Truck With Jumbo 1¾ H. P. Engine

Several advanced and practical features of internal combustion engine design are embodied in the Jumbo construction. For example, the magneto is attached to the cylinder head directly over the intake valve, which insures positive ignition, and longer life to the igniter insulation, and complete utilization of the fuel.



Jumbo Concrete Mixer Complete with engine and truck, Net Cash Price \$110.00

Letz-Dixie Mixed Feed Maker



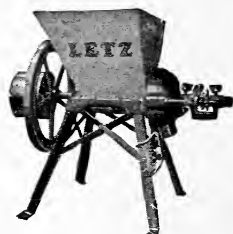
With a Letz-Dixie grinder every stalk, stem and vine formerly wasted can now be converted into a most valuable feed, then into milk, beef, pork and finally into money at a far greater profit than ever before known.

No. 180 (Power required 10 to 20 H. P.) Price \$180.00. **Net Cash Price \$171.00.**
 No. 244 (Power required 15 to 25 H. P.) Price \$320.00. **Net Cash Price \$304.00.**

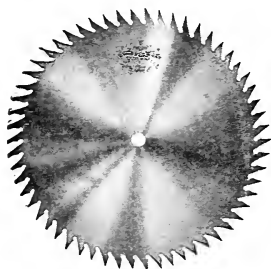
Letz Grinders

For grinding cob corn, shelled corn, oats and all other small grains.

No.	Capacity	H. P.	Grinding Plates	Price	Net Cash Price
6 Jr.	6 to 25 bu.	2 to 6	6" in dia.	\$30.00	\$28.50
109X	12 to 50 bu.	4 to 15	8" in dia.	50.00	\$47.50
111X	20 to 75 bu.	8 to 20	10" in dia.	55.00	\$52.25



Curtis Guarantee Cord-Wood Saws

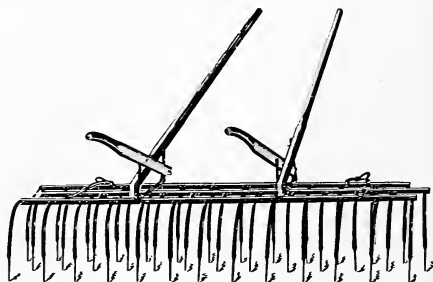


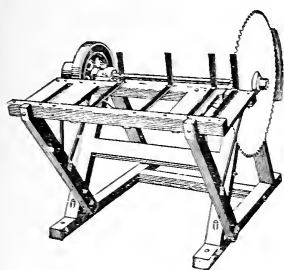
Always run the saw at proper speed, too high or too low is equally bad.

Dia.	No. Teeth	Speed	Price
20"	52	1800	\$4.50
22"	56	1636	5.00
24"	60	1500	5.75
26"	64	1384	6.75
28"	70	1285	8.00
30"	76	1200	9.50

Hallock Pattern Weeder

A Standard Weeder having curved teeth. Price \$16.00. **Net Cash Price \$15.20.**

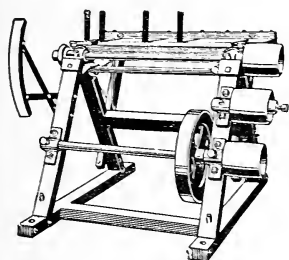
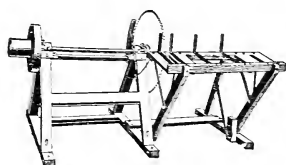




JUMBO SAW FRAMES

No. 700 With Tilting Table. Built especially for sawing cord wood. Mandrel of finest cold rolled steel $1\frac{7}{16}$ " dia., 49" long — fitted for saw with $1\frac{3}{8}$ " hole. Flywheel is accurately machined and carefully balanced, $15\frac{1}{2}$ " dia., weight 65 lbs. Standard pulley size 6 x 6". Price \$30.00. **Net Cash Price \$28.50.**

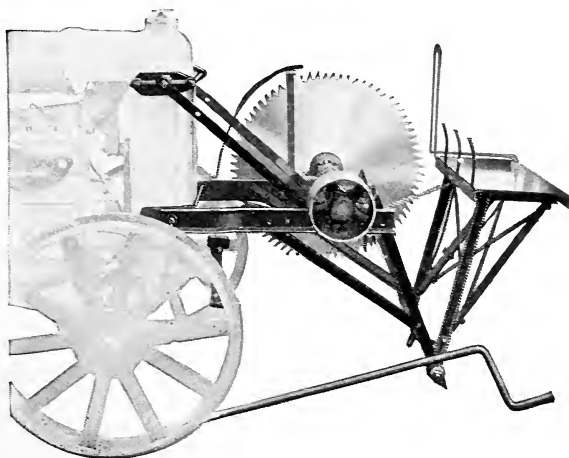
No. 701 With Pole Extension — One of the best frames obtainable for sawing long poles and heaviest cord wood. Price \$32.00. **Net Cash Price \$30.40.**

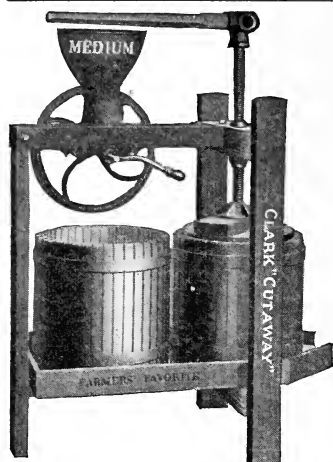


No. 702 With Flywheel Beneath. Flywheel entirely out of the way on this frame — suitable for sawing long poles without any interference — Right or Left Hand. For use with tractor, engine or thresher belt we can furnish 10 x 8" pulley in place of flywheel and 6 x 6" pulley. Price \$40.00. **Net Cash Price \$38.00.**

STOVER SAW FRAME

Take the saw to the wood not the wood to the saw. With the Stover Rig attached to your Fordson, you can take your outfit wherever poles, etc., happen to be, saw them up, and go on. Price Complete with 30" saw and 5" rubber belt \$60.00. **Net Cash Price \$57.00.**





CLARK "CUTAWAY"

Farmer's Favorite Cider Mills — are made in three sizes — the Jumbo, Senior and Medium — two of which may be used with power if desired. Although varying greatly in size and capacity, each mill embodies all the essentials necessary to profitable and successful cider making. Because of the method of grinding the apples into a perfect paste-like pomace, these mills excel all others in quantity of cider which can be obtained. The grinder leaves none of the crushing to be done under the press.

Jumbo Mill — 4 ft. 6 in. wide, 4 ft. 2 in. long, 5 ft. 10 in. high, weight 1250 lbs.

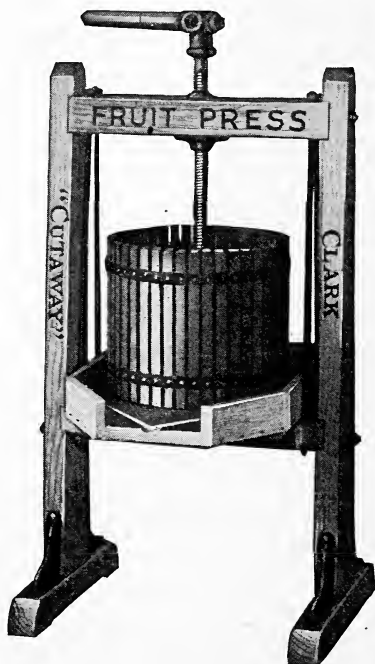
Senior Mill — 2 ft. 4 in. wide, 4 ft. long, 3 ft. 10 in. high — 18 in. curb, weight 387 lbs.

Medium Mill — 2 ft. wide, 2 ft. 4 in. long, 3 ft. 2 in. high — 11 in. curb, weight 208 lbs.

CLARK "CUTAWAY" Fruit Presses

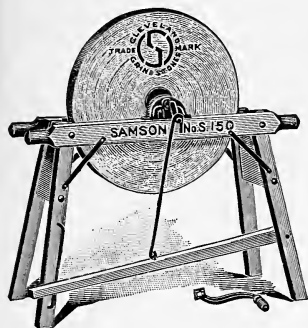
A Press without a grinder is much in demand for pressing grapes, berries, etc., made in four sizes.

The Fruit Press is similar in design to the press used on the cider mills and is just as sturdily made of selected oak and maple. The curb is made of clear, hard wood, the slats being riveted to strong steel hoops. It is a press that will give years of service.



No.	Width	Height	Height with screw raised	Diameter of curb (inside)	Depth of curb	Weight
1	1 ft. 9 in.	2 ft. 4 in.	3 ft. 4 in.	7½ in.	8 in.	50 lbs.
2	2 ft.	3 ft.	4 ft. 7 in.	11 in.	11 in.	75 lbs.
3	2 ft. 4 in.	4 ft. 1 in.	5 ft. 7 in.	15 in.	13½ in.	135 lbs.
4	2 ft. 4 in.	4 ft. 5 in.	6 ft.	18 in.	18 in.	195 lbs.

Prices on Application



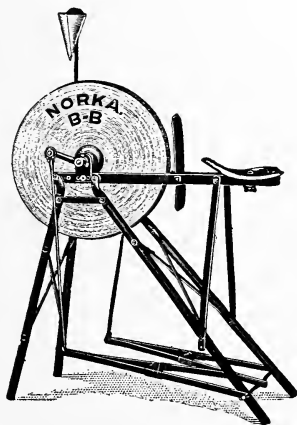
GRINDSTONES

SAMSON MOUNTED GRINDSTONES

This frame is made of seasoned hard wood. The legs are securely gained into side pieces and the ends are in one piece. Two bolts at each end pass through the entire frame from side to side. The ends of the side bars are neatly turned to serve as handles. No. 1 with large stone. Price \$10.50 Net. Stone only with bushings. Price \$6.00 Net.

NORKA BALL BEARING GRINDSTONE

A very strong and easy running grindstone, practically indestructible. The frame is constructed of heavy tubular steel, thoroughly braced. The shaft is of cold rolled steel and turns in a splendid ball bearing device. The Pitman connection is also ball bearing. Price \$10.50 Net. Stone only with bushings. Price \$5.75 Net.



ALOXITE — A GREAT SCYTHE STONE



Made in four sizes.

No. 188 — 10" long	Price \$0.30
No. 190 — 10" long	" .30
No. 191 — 12" long	" .35
No. 192 — 10" long (heavy)	.35

CARBORUNDUM NO. 57 FILE

Here is one of the most useful tools that you can own. Will sharpen about every farm or garden tool. Price \$1.00.



STEEL DRAG SCRAPERS

No. 3 — 3 cubic ft. Price \$9.50 Net.

No. 2 — 5 cubic ft. Price \$10.00 Net.

No. 1 — 7 cubic ft. Price \$11.00 Net.

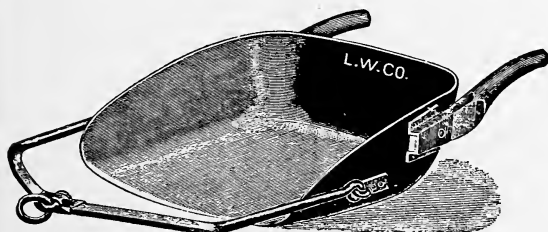
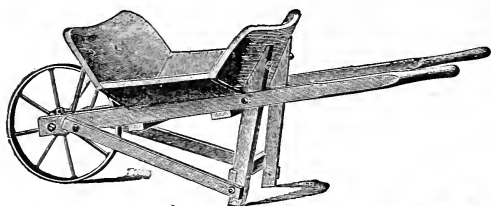


Fig. 603.

CANAL BARROWS

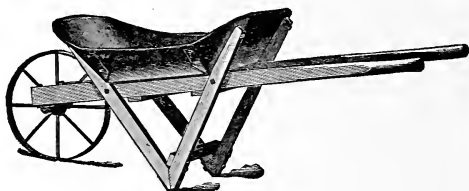


Full Bolted with Wood Tray,
Wood or Steel Wheel.

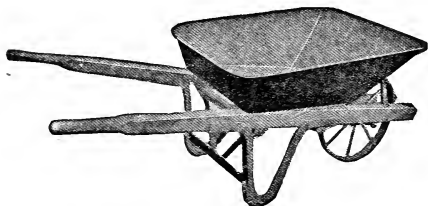
Price \$5.25 Net.

Full Bolted with Steel Tray,
Wood or Steel Wheel.

Price \$5.50 Net.



MORTAR BARROWS



Lansing No. F2 \$8.25 Net.

Lansing No. F24 8.75 Net.

GARDEN BARROWS

Buchs No. 2 (large) \$8.50
Net.

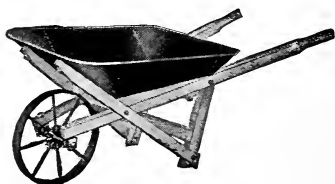
Buchs No. 3 (medium)
\$8.00 Net.

Eastern Garden No. 3
(medium) \$7.25 Net.

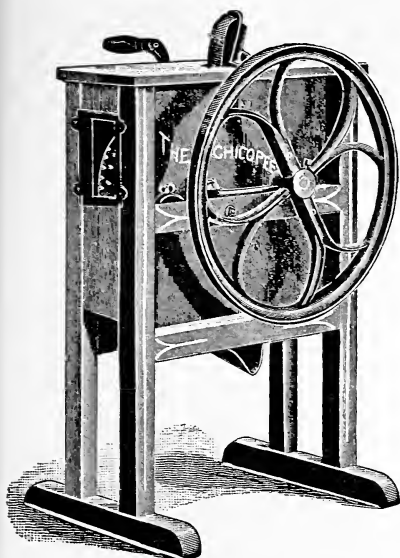
Eastern Garden No. 4
(large) \$7.75 Net.



All-Wood Frame Steel Tray General Purpose BARROW



For the contractor, farm, garden and home use, cheapness and lightness have not been gained by sacrificed strength, rigidity or finish. And it has not been made by simply building it "child size". It is a real man's barrow and is made for real work. Price \$5.50 Net.



Corn Shellers

Frame—Of hard wood, well mortised together, and neatly painted.

Large Hopper—Adjustable to shell all sizes of ears, and large Dent corn as well.

Heavy Fly-Wheel—With shaft of cold rolled steel gives not only strength of construction, but smooth running with little power.

Separator—On the front of the machine, which separates the ears from the shelled corn.

Chaff Sieve—Assists in screening the corn which passes out through the small spout at the bottom. Weight 125 lbs.

Chicopee Corn Sheller

Price \$13.75 Net Cash Price \$13.00

Chicopee Double Hole Corn Sheller

(Hand or Power)

Price \$34.38 Net Cash Price \$32.65

Lion Corn Sheller

Price \$15.00 Net Cash Price \$14.25

Red Chief Corn Sheller

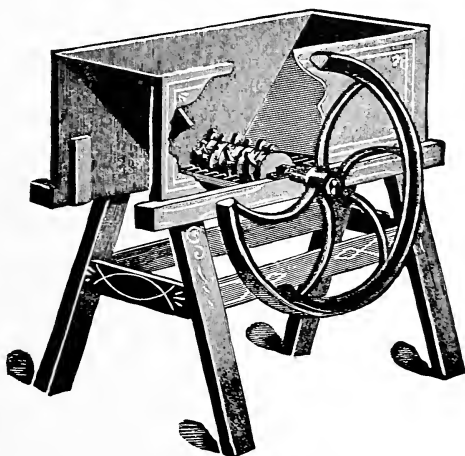
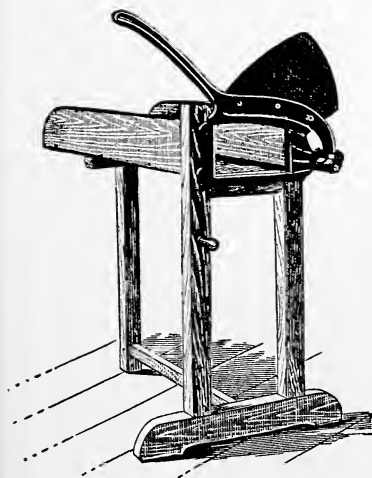
Price \$3.50 Net.

Champion Vegetable Cutter

This is one of the best machines in the market for cutting all kinds of vegetables. It is made with a wrought shaft with sections of knives fastened to it, and arranged so that a rotation of knives is continually passing a bed knife with cross knives passing between the section of knives; cutting always near the center shaft, making it cut easy and fine enough for cattle or sheep; also making a very regular cut.

This machine will cut sixty bushels an hour.

	Weight	Price	Net Cash Price
No. 1½	132 lbs.	\$12.00	\$11.40



Nonesuch Feed Cutters

This is a simple and durable machine. The device for adjusting the lever, being removed from the pivot, enables us to have a stationary pivot firmly attached to the machine, and consequently not liable to get loose, as in all machines where the pivot is adjustable.

No.		Weight	Price	Net Cash Price
No. 1	Straight Knife	58 lbs.	\$5.25	\$5.00
" 2	Hawk Bill Knife	58 "	5.50	5.25
" 2½	" "	65 "	5.88	5.60
" 3	" "	85 "	7.63	7.25

We also sell

Power Feed and Ensilage Cutters

SQUARE AND ROUND POINT WOOD D. OR LONG HANDLED PLAIN BACK FULL POLISHED SHOVELS



No. 2, Grade A \$1.75

No. 3, Grade A \$1.85

No. 2, Grade B \$1.60

No. 3, Grade B \$1.70

GENUINE OLIVER AMES SHOVELS

No. 2, \$2.00

No. 3, \$2.10



WOOD D. OR LONG HANDLED PLAIN BACK FULL POLISHED No. 2 SPADES \$1.60

COAL SCOOPS

No. 3 Riveted back	\$1.75
No. 4 " "	1.85
No. 5 " "	1.95

HOUSEHOLD FURNACE SCOOPS

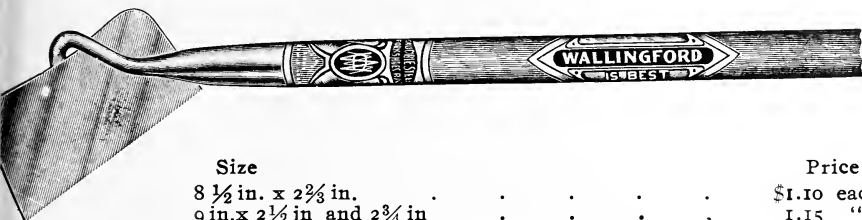
No. 1500 Long Handle	\$1.00
No. 1600 Mal. D. Handle	1.00
Oliver Ames	2.00

SNOW SHOVELS

No. 25 Trojan spring steel (black)	\$1.00
No. 29 Eclipse (Galv.)	1.25
Wirts Snow Pushers	1.75
No. 81 Snow Scoop 30 in.	8.00
Sidewalk Cleaners, socket pattern . . . . .	.90

TOBACCO HOES

These Hoes are specially adapted to Connecticut Valley Trade.



Size	Price
8 1/2 in. x 2 3/8 in.	\$1.10 each
9 in. x 2 1/2 in. and 2 3/4 in.	1.15 "
9 1/2 in. x 2 1/2 in.	1.25 "
10 in. x 2 1/2 in.	1.30 "
11 in. x 2 1/2 in.	1.40 "

In Dozen Lots 10% Discount

GARDEN OR FIELD HOES

7 inch	\$1.00 each
8 inch	1.10 "
9 in. x 3 3/4 in.	1.20 "
10 in. x 3 1/2 in.	1.30 "

SPECIAL HEART SHAPED GARDEN HOES

7—W	\$1.15 each
7 1/2—W	1.25 "

STEEL GARDEN RAKES

12 Teeth, 5 1/2 ft. Handle	Price, \$0.95 each
14 " " " "	1.00 "
16 " " " "	1.10 "
18 " " " "	1.20 "

WIRE LAWN RAKES

24 Teeth—Bolted Pattern	Price \$0.90 each
-------------------------	-------------------

SPADING FORKS

4 Tine, Long Handle, Strap Ferrule	\$1.65
4 " Mal. D " " "	1.65
5 " Long " " "	2.10
5 " Mal. D " " "	2.10
5 " Wood D " " "	2.50

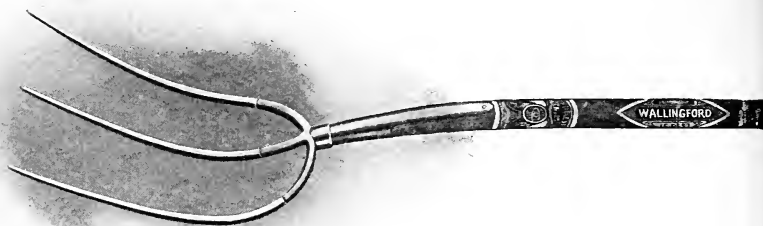
ADJUSTABLE GARDEN CULTIVATORS

3 Tooth Short Handle (8 in.)	\$0.45
3 " Long " (4 ft.)	.70
5 " " " (4 1/2 ft.)	1.00
Easy Pull Long Handle (4 ft.)	.65
" " " (4 1/2 ft.)	1.25
Garden Trowels Drop and Straight Shank	.75
Triangular Steel Blade Onion Weeder	.50

TURF EDGERS

Long Handle, Socket Pattern	\$1.15	Shank Pattern	\$1.05
Iron D " " "	1.20	" " "	1.10

Oval Three-Tine Ferrule Hay Forks



4	ft.	Bent handle, 13 in.	Tine, plain ferrule	.	.	.	.	Price, \$1.15 each
4½	ft.	"	" 13 "	"	"	"	"	" 1.20 "
5	ft.	"	" 14 "	"	"	"	"	" 1.30 "
5½	ft.	"	" 14 "	"	"	"	"	" 1.40 "
6	ft.	"	" 14 "	"	"	"	" strap ferrule	" 1.65 "

"Electric" Hay Knives

Convex, curved blades with shanks forged from a single piece of high grade steel.
36 inches long. Price, \$1.75 net

Manure Forks



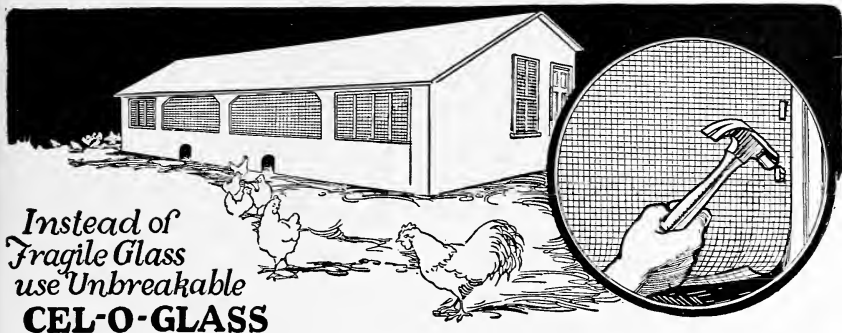
					Price	Price	Price
Long	Handle	Common	Ferrule		4 Tine	5 Tine	6 Tine
Long	"	Strap	"	.	\$1.45	\$1.65	\$1.90
Mal. D	"	Common	"	.	1.60	1.80	2.00
Mal. D	"	Strap	"	.	1.45	1.65	1.90
Wood D	"	Common	"	.	1.60	1.80	2.00
Wood D	"	Common	"	.	1.85	2.05	2.30
Wood D	"	Strap	"	.	2.00	2.20	2.40
S. A	B.	Large 4 Tine Fork for handling light manure		.	.	.	2.75

Steel Manure Hooks

						Price each
4	Tine	Bent Head	5 ft.	Handle	.	\$1.25
4	"	"	" 6 ft.	"	.	1.45
5	"	"	" 5 ft.	"	.	1.40
5	"	"	" 6 ft.	"	.	1.60

Steel Potato Hooks

4	Tine	Bent Head	4½ ft.	Handle	.	\$1.00
5	"	"	" " "	"	.	1.25
6	"	"	" " "	"	.	1.35



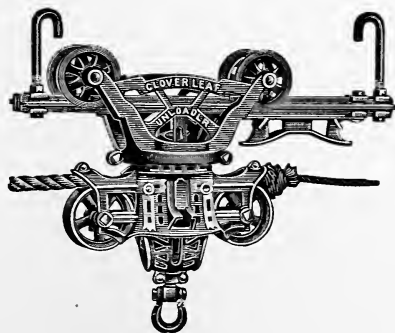
Cel-O-Glass is an unbreakable highly translucent material made by coating tough wire mesh with a transparent substance that lets through practically as much light as clear glass. Is very light in weight, absolutely weatherproof and extremely easy and economical to use. It is flexible, comes in rolls 3 ft. wide and can be used almost any place where fragile glass is required. Price 1 to 10 linear ft. 50¢. ft.; 10 to 50 linear ft. 45¢. ft.; 50 to 100 linear ft. 40¢. ft.; full roll 100 linear ft. 39¢. ft.

The Myers Clover-Leaf Unloader

PRICES

Clover Leaf Hay Unloader No. 114	\$10.25
Double Steel Track - - -	25c per ft.
Hanging Hooks - - -	18c each
Rafter Brackets - - -	06c "
3/4" Floor Hooks - - -	18c "
Wood, Knot passing, pulley Fig. 1120	70c "
Double Harpoon fork Fig. 1314	3.00 "
Four tine Grapple fork Fig. 1351	10.50 "
Six " " " " " 1438	12.00 "

5% discount for cash on complete outfit



The advantage of a hay carrier as a means of storing away Hay or Grain are so well known that it is not necessary to go into details. They save the time and expense of from one to three men at harvest time—a large item.

PURINA

O-MOLENE!
EVERYWHERE!

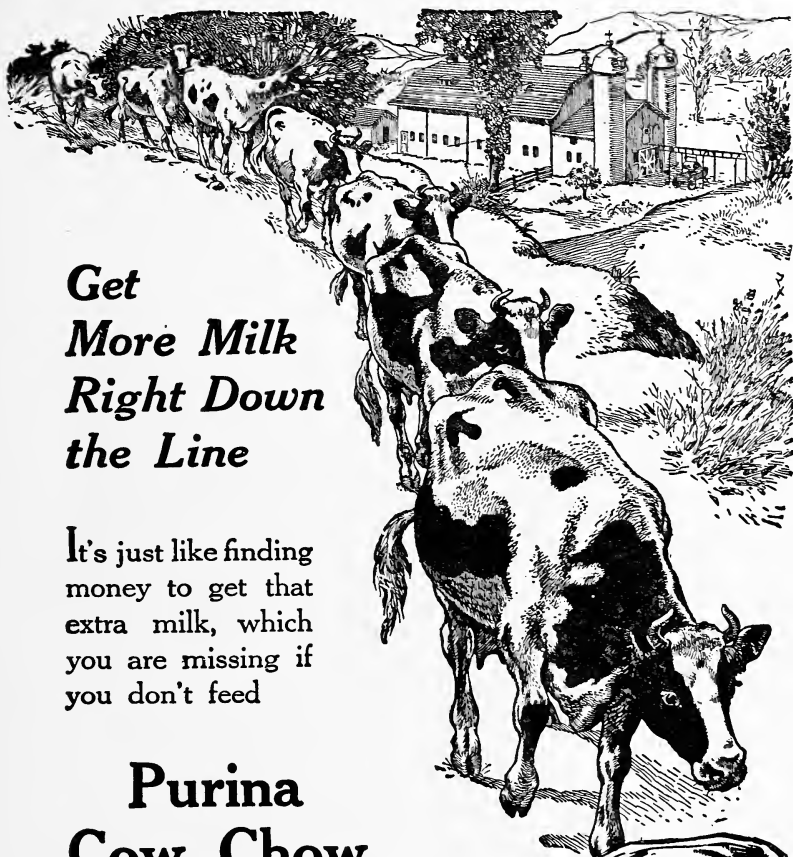
Today, O-Molene is the biggest selling horse feed in America!

The farmer, the storekeeper with one or two delivery horses, and the large drayage companies in every part of the country all find O-Molene a thoroughly satisfactory ration for horses or mules.

O-Molene feeders have found out that their horses look better, are more vigorous, work harder than when fed on corn or oats alone. That's because O-Molene is made to give just those results. You get the choicest feeding stuffs in O-Molene — no dirt or screenings; always uniformly mixed. That makes it go farther too.

Let us show you what O-Molene will do for your horses; drop in or phone.

PURINA



***Get
More Milk
Right Down
the Line***

It's just like finding money to get that extra milk, which you are missing if you don't feed

Purina Cow Chow

Let's put the proof in the pail. Arrange for a milk scale test that will beat all the talk on earth.

Phone Us



PURINA



Purina Makes the Difference

Equal in laying ability. But the hen on the right was fed a common grain ration while the other was fed *Purina Chicken Chowder* and *Purina Hen Chow*.

Purina Poultry Chows form a complete ration, containing material for an equal number of yolks and whites.

Let us show you what Purina Hen Chow and Chowder will do. Phone your order to-day.



Save Those Chicks

About 50 out of every 100 baby chicks die during the first six weeks. Experience proves that less than 10 Purina-fed chicks die in the same period — Doesn't the profit on 40 extra chicks look good to you? Purina Chick Startena and Baby Chick Chow are the answer. Let us tell you more.

At the Store with the Checkerboard Sign



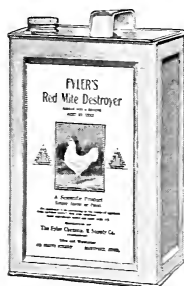
PURINA



B - K

B-K is especially adapted for the prevention and treatment of poultry diseases such as Roupe, Canker, Cholera, Bacillary and White Diarrhea. B-K is also a Powerful Disinfectant.

Prices 10 oz., 60¢, Quart, \$1.25, Gal. \$3.00, 5 Gal. \$12.50.



CARBOLA

Carbola — The modern disinfecting whitewash can be used as a paint or powder, spray it, brush it or dust it.

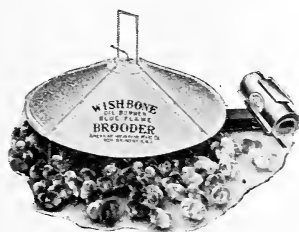
Prices 5 lb. 75¢, 10 lb. \$1.25, 50 lb. \$5.00.

FYLER'S RED MITE DESTROYER

Applied with a Sprayer

Simply spray or paint heavily the roosts, dropping boards, nests, and wall near them with Fyler's Red Mite Destroyer once or twice a year and keep your poultry house free from this costly pest. The increased egg production from mite-free birds more than offsets the slight cost of the material.

1 qt. bottle, 60 cents, ½ gal. can, 90 cents, 1 gal. can \$1.50, 5 gal. can, \$6.00.



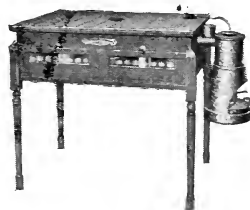
WISHBONE BLUE FLAME OIL BROODERS

No.	Chick Capacity	Cover Diam.	Net Prices
22	50-100	22 in.	\$12.00
32	100-350	32 in.	16.00
42	400	42 in.	19.00
52	600	52 in.	22.00

WISHBONE LAMP INCUBATORS

Built to last a lifetime, double inch walls pure copper, hot water heating system.

No.	Egg Capacity	Length	Width	Height	Net Prices
85	85	30 in.	24 in.	21 in.	\$20.50
170	170	49 in.	24 in.	32 in.	41.00
255	255	55 in.	24 in.	32 in.	54.00

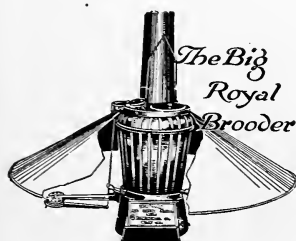


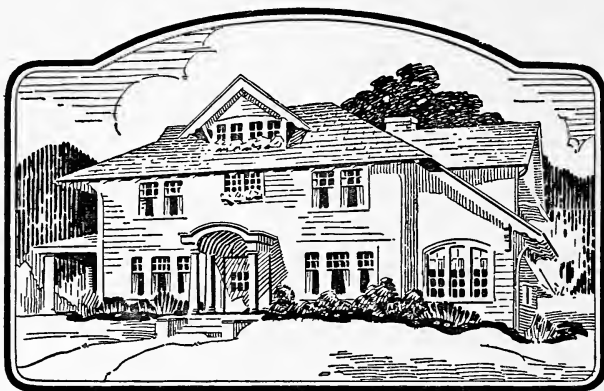
COAL BROODERS

No. 5 Capacity up to 500 Chicks Price \$21.50 Net.
No. 6 Capacity up to 100 Chicks Price \$26.50 Net.

O. K. POULTRY LITTER

(Imported peat moss in 200 lb. bales)
1 Bale \$3.75 5 Bales \$3.50
10 Bales \$3.25 25 Bales \$2.75
delivered or 25¢ per bale less at our warehouse.





Buy the Best

**MONEY SAVED IS
MONEY EARNED!**

SAVING two or three gallons of paint on the average house means something to the man who buys carefully.

B. P. S. Fine Grinding makes a paint which covers 350 to 400 square feet, two coats—25 per cent more than Lead and Oil.

True Economy in B. P. S.

If you are tempted to buy paint because of the low price per gallon, please consider that the application cost is usually twice the cost of the paint, also that it costs as much or more to apply a cheap paint as it does to apply the Best Paint Sold. In fact, it costs less to use B. P. S. than any other paint, because the covering and spreading qualities of B. P. S. are greater and more than offset any difference in price.

Measure the value of your paint by the years of service it will give you—plus the appearance and number of square feet it will cover to the gallon—and you will decide to use B. P. S.—the Best Paint Sold—and in the end, the lowest in cost.

82 Beautiful Colors to Select From

We carry a full line of Brushes, Linseed Oil, Turpentine and Jewett White Lead

We don't make Safekote Roofing

BUT we want to tell you that the manufacturers themselves couldn't be more certain about Safekote quality than we are. It's the best of its kind and the most economical. That's why we sell it—as well as why we sell so much of it.

If you are building or about to build, or if you are going to reroof, let us help you pick out the particular kind of Safekote Roofing that is best suited to your needs.

We have a complete stock of Safekote Guaranteed Shingles in green, red, blue-black and the striking new multi-chrome shingle called "Color-mixt." We also carry Safekote Roll Roofing, Roofing Papers, Roof Cement and Paints. Come see us; or write or phone for particulars.

Safekote
more than waterproof

Roofing

MADE IN NEW ENGLAND

"300 to 1"

Slate Surfaced Shingles

Slate Surfaced Strip Shingles

Slate Surfaced Roll Roofing

Smooth Surface Roofing

Individual Shingles

Waterproof Building Paper

If you are building, or about to re-roof, let us show you how SAFEKOTE will meet your every need. Economically, Beautifully and Durably.

Order Your Repairs Before the Rush Comes

Don't get caught this spring with implements that cannot be operated because of a few needed repairs.

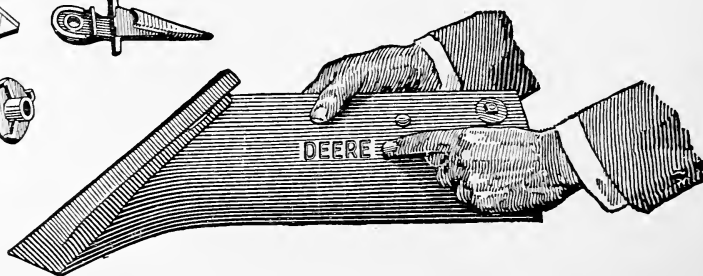
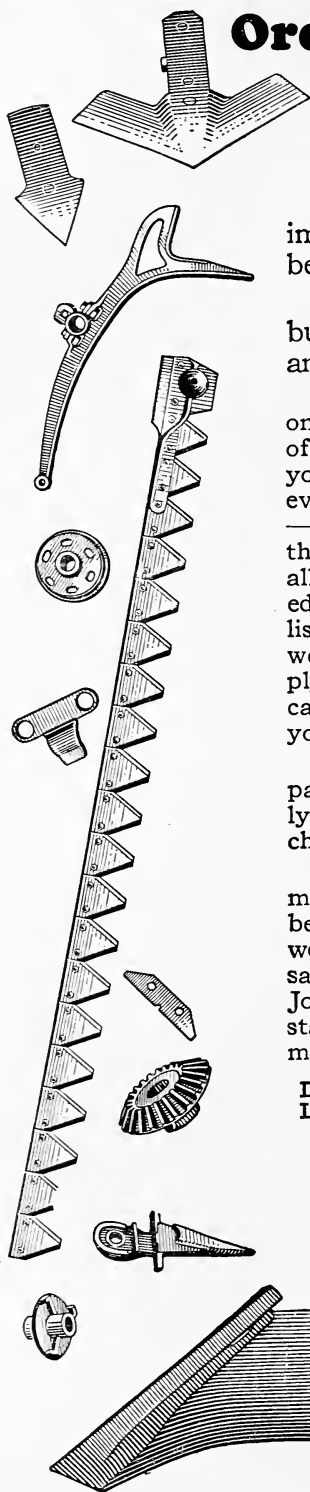
A delay of a day or two in your busy season may result in big dollars-and-cents loss.

Here's a way to prevent delays later on. Right now, when you have plenty of time, take a complete inventory of your implement equipment. Go over every machine you plan to use this year—see if new boxes are not needed—if the plow shares are in usable shape—if all parts are whole. Jot down the needed parts on each machine, give us the list so that we can order such parts that we may not have in stock. We will supply the new parts to you quickly, so you can get your machines in ship-shape for your field work.

Don't forget, too, that genuine repair parts last longer, fit better and materially prolong the usefulness of your machinery.

While you are going over your equipment, you may find machinery that is beyond profitable repair. Remember, we have a full line of John Deere labor-saving, crop-producing implements. John Deere machinery, built to a high standard of quality, is the most economical in the long run.

Don't forget to order your repairs early. Last-minute ordering is usually costly.



SEED AND PLANT TABLES.

	Quantity Per Acre	Weight Per Bu.
Barley	95 to 120 lbs.	48 lbs.
Blue Grass (Canada)	25 to 40 lbs.	14 lbs.
" (Kentucky)	25 to 40 lbs.	14 lbs.
Buckwheat	50 to 60 lbs.	48 lbs.
Clover-Alfalfa (Broadcast)	20 to 30 lbs.	60 lbs.
" (Drills)	15 to 20 lbs.	60 lbs.
" Crimson	10 to 20 lbs.	60 lbs.
" Red	10 to 15 lbs.	60 lbs.
" White	5 to 10 lbs.	60 lbs.
Corn (Hills)	15 to 20 lbs.	56 lbs.
" (drills for fodder)	60 to 75 lbs.	56 lbs.
" (broadcast)	120 to 150 lbs.	56 lbs.
Cow Peas in Drills	60 to 90 lbs.	60 lbs.
Millet (Common)	25 to 40 lbs.	48 lbs.
" (Hungarian)	25 to 40 lbs.	48 lbs.
" (Japanese)	12 to 20 lbs.	32 lbs.
Oats	60 to 90 lbs.	32 lbs.
Orchard Grass	25 to 40 lbs.	14 lbs.
Rape (broadcast)	5 to 6 lbs.	60 lbs.
" (drills)	3 to 4 lbs.	60 lbs.
Red Top (unhulled)	25 to 40 lbs.	14 lbs.
" (re-cleaned)	10 to 15 lbs.	35 lbs.
Rhode Island Bent Grass	25 to 40 lbs.	14 lbs.
Rye Grass (Italian)	40 to 50 lbs.	18 lbs.
Soja Beans (broadcast)	50 to 75 lbs.	60 lbs.
" (in rows)	20 to 30 lbs.	60 lbs.
Sudan Grass	15 to 20 lbs.	
Timothy	15 to 30 lbs.	45 lbs.
Vetch (Spring)	50 to 70 lbs.	60 lbs.
Vetch (Winter)	30 to 60 lbs.	60 lbs.
Wheat	90 to 120 lbs.	60 lbs.
Potatoes,	12 Bu.	60 lbs.
Clover,		8 pounds
Timothy, } together, for one acre,		1/2 bushel
Red Top, }		1 bushel
Peas in drills are sown 1 1/4 to 1 1/2 bushels to the acre.		
Carrots,	usually sown to the acre, 2 1/4 to 3 lbs.	
Beets,	" " " " " 4 to 6 lbs.	
Parsnips,	" " " " " 3 to 6 lbs.	
Onions,	" " " " " 4 to 6 lbs.	
Ruta Bagas,	" " " " " 1 lb.	
Turnips,	" " " " " 1 to 1 1/2 lbs.	
Beans,	" " " " " 1 1/2 to 2 bu.	

Quantity of Corn Required to Plant an Acre, Five Grains in a Hill.

3 ft. x 2	18 qts.	3 ft. x 3	14 qts.
3 1/2 ft. x 3	10 qts.	3 1/2 ft. x 3	8 qts.
3 ft. x 4	7 qts.	4 ft. x 4	6 qts.

Number of Plants per Acre at Given Distances.

1 ft. x 1 ft.	43,560	9 ft. x 9 ft.	537
1 1/2 ft. x 1 1/2 ft.	19,360	12 ft. x 12 ft.	362
2 ft. x 2 ft.	10,890	15 ft. x 15 ft.	163
2 1/2 ft. x 2 1/2 ft.	6,969	18 ft. x 18 ft.	134
3 ft. x 3 ft.	4,840	20 ft. x 20 ft.	100
4 ft. x 4 ft.	2,722	25 ft. x 25 ft.	73
5 ft. x 5 ft.	1,742	30 ft. x 30 ft.	47
6 ft. x 6 ft.	1,210	40 ft. x 40 ft.	20

Quantity of Seed Required for a Given Number of Plants, or Number of Hills, or Length of Drill.

Asparagus,	1 oz. to 65 ft. of drill	Musk Melon,	1 oz. to 60 hills
Beets,	1 oz. to 50 ft. of drill	Okra,	1 oz. to 40 ft. of drill
Beans Dwarf,	1 qt. to 100 ft. of drill	Onion,	1 oz. to 100 ft. of drill
Beans Pole,	1 pt. to 150 hills	Onion Sets, small,	1 qt. to 4 ft. of drill
Carrot,	1 oz. to 150 ft. of drill	Parsley,	1 oz. to 150 ft. of drill
Cabbage,	1 oz. to 3,000 plants	Parsnip,	1 oz. to 200 ft. of drill
Cauliflower,	1 oz. to 3,000 plants	Peas,	1 qt. to 100 ft. of drill
Celery,	1 oz. to 4,000 plants	Pumpkin,	1 oz. to 40 hills
Cucumbers,	1 oz. to 50 hills	Pepper,	1 oz. to 2,000 plants
Corn,	1 qt. to 400 hills	Radish,	1 oz. to 100 ft. of drill
Dandelion,	1 oz. to 200 ft. of drill	Salsify,	1 oz. to 70 ft. of drill
Endive,	1 oz. to 150 ft. of drill	Spinach,	1 oz. to 100 ft. of drill
Egg Plant,	1 oz. to 2,000 plants	Squash, early,	1 oz. to 50 hills
Lettuce,	1 oz. to 4,000 plants	Squash, marrow,	1 oz. to 16 hills
Leek,	1 oz. to 100 ft. of drill	Tomato,	1 oz. to 3,000 plants
Watermelon,	1 oz. to 80 hills	Turnip,	1 oz. to 150 ft. of drill

One Gallon, by the U. S. Standard Unit of Liquid Measure contains 231 cubic inches.

The U. S. Bushel contains 2,150.42 cubic inches.

An Acre contains 43,560 square feet.

USEFUL CHEMICAL MEMORANDA

(Partly from the first annual report of the Connecticut Agricultural Experiment Station, 1876.)

Animal and vegetable substances, such as flesh, bone, wood, grain, manure, and the like, contain three classes of materials: Water, Organic Matters and Mineral Matter or Ash. If we heat a piece of wood, a whisp of hay, a bone, or a portion of manure or soil, in an oven, the water will be dried out. If we put the dried material in the fire, the *Organic Matter*, which consists mostly of the chemical elements, carbon, oxygen, hydrogen, and nitrogen will be burned away, and there will remain the *Mineral Matter* or *Ash*. The ash of these different materials generally contains more or less potash, soda, lime, magnesia, iron, alumina, silica, phosphoric acid, sulphuric acid, chlorine, or other ingredients. The proportions of these vary widely in different substances, from the large quantities to the merest traces.

Moisture.—All fertilizers contain more or less water, which, of course has no commercial value, and serves to make them heavier and relatively poorer in valuable ingredients. In the analysis that which is removed by heating to 212° Fahrenheit (or in some cases to a somewhat higher temperature), is designated as moisture. By subjecting the dried material to a higher temperature, the organic and volatile matters are driven off, and the ash remains. By treating this ash with strong acids, all that is of any value is dissolved.

Sand and Insoluble Matters.—The residue, which resists the action of both fire and strong acids, consists of silica and other mineral matters. These possess no fertilizing value, and are classified as sand, etc.

Nitrogen, Ammonia.—In our ordinary fertilizers, much or all of the nitrogen exists in unavailable forms. By more or less rapid alterations, by decay or otherwise which take place in the soil, these are changed to other compounds, which the plant can readily use as food. Of these latter nitric acid, which contains nitrogen combined with oxygen, is one; ammonia which consists of nitrogen and hydrogen and is represented by the chemical formula NH_3 is another. 14 parts by weight of nitrogen unite with 3 parts of hydrogen to form 17 parts of ammonia. Accordingly 14 parts of nitrogen are said to be equivalent to 17 of ammonia, or what is the same thing 100 parts of nitrogen are reckoned as equivalent to 121 parts of ammonia. In pure sulphate of ammonia, all the nitrogen is in the form of ammonia. In Peruvian guano, some of the nitrogen exists as ammonia also. In our ordinary fertilizers there is little or no ammonia. The very common practice of reckoning nitrogen as ammonia in fertilizers which do not contain it in this form is incorrect, misleading and therefore wrong, and ought to be abolished. Ammonia combined with sulphuric acid, forms sulphate of ammonia; nitric acid combined with soda, forms nitrate of soda.

Phosphoric Acid: SOLUBLE, REVERTED AND INSOLUBLE.—By phosphoric acid is understood the compound of phosphorous and oxygen, which is represented by the chemical formula, P_2O_5 . This combined with lime, forms phosphate of lime. The phosphate of lime which occurs in bone, and in South Carolina and other fossil and mineral phosphates, contains three parts of lime to one of phosphoric acid. This is often called bone phosphate, and is insoluble in water. When the bone phosphate is treated with sulphuric acid, the latter takes part of the lime to itself, forming sulphate of lime, and leaves the phosphoric acid in the form of a *Superphosphate*. This last is soluble in water, and when used as a fertilizer can be taken up by the plant at once, while the bone phosphate is slowly available as plant food. Phosphoric acid which has been rendered soluble, often enters into other forms of combination with lime, alumina, etc., which, though insoluble in water, are soluble in citrate of ammonia. The terms, reverted, reduced and precipitated, are applied to it when in this form.

The reverted phosphoric acid ranks in solubility, and consequently in value, between the soluble and insoluble. The soluble and reverted are sometimes classed together as *Available* phosphoric acid.

In some analyses the percentage of phosphoric acid is not stated separately, that of "bone phosphate of lime" being given in its stead. Sometimes the expression "soluble bone phosphate of lime" is met with, which is certainly a misnomer. 142 parts by weight of phosphoric acid P_2O_5 unite with about 168 parts of lime CaO to form 310 parts of bone phosphate $Ca_3(PO_4)_2$; 100 parts or pounds of phosphoric acid are said, therefore, to be equivalent to 218 parts of bone phosphate. Special stress is laid on this point, because those not familiar with chemistry are apt to be deceived in comparing analyses, in some of which the term phosphoric acid, and in others the term bone phosphate, is used. It would be more accurate and clear, and in every way better to discard the term bone phosphate of lime in analyses of fertilizers, and speak only of phosphoric acid.

Potash, or potassa, is the compound of the metal potassium with oxygen, which is represented by the chemical formula K_2O or KO . This combined with sulphuric acid forms sulphate of potash. Potassium and chlorine together form chloride of potassium, or "muriate of potash," as it is called by dealers.

100 pounds of pure sulphate of potash contains about 54 pounds of "actual potash." 100 pounds of sulphate of potash are therefore said to be equivalent to 54 pounds of actual potash, and vice versa, 54 pounds of potash, in the sulphates are reckoned as equivalent to 100 pounds of sulphate of potash. In the "muriates" 100 pounds of chloride of potassium are reckoned equivalent to about 63 pounds of potash, and vice versa.

Carbonate of Potash, K_2CO_3 — This fertilizer chemical is the ingredient which gives to wood ashes and cotton hull ashes their value as tobacco fertilizers, and it is practically free from magnesia. It was formerly prepared by extraction from wood ashes, and formed the "pearl ash" of commerce. It has been used with good effect as a tobacco fertilizer in the Poquonock experiments.

The following figures will be found useful in calculations of the composition of fertilizers.

NITROGEN COMPOUNDS

14.	parts of Nitrogen	are contained in	17.	parts of Ammonia.
100.	"	"	121.43	"
82.35	"	"	100.	"
17.	Ammonia	"	66.	Sulphate of Ammonia.
100.	"	"	388.2	"
25.8	"	"	100.	"
14.	Nitrogen	"	66.	"
100.	"	"	471.4	"
21.2	"	"	100.	"
14.	"	"	54.	Nitric Acid.
100.	"	"	385.7	"
25.9	"	"	100.	"
14.	"	"	85.	Nitrate Soda.
100.	"	"	607.1	"
16.47	"	"	100.	"
54.	Nitric Acid	"	85.	"
100.	"	"	157.4	"
63.5	"	"	100.	"
85.	Nitrate of Soda correspond to	17.	"	Ammonia.
100.	"	"	20.	"
500.	"	"	100.	"

PHOSPHORIC ACID

100.	parts of Phosphoric Acid correspond to	218.3	parts of Bone Phosphate.
45.8	"	100.	"

POTASH (Potassa)

100.	parts of Sulphate of Potash contains	54.08	parts of Potassa.
184.9	"	100.	"
100.	Chloride of Potassium correspond to	63.17	parts of Potassa
158.3	"	100.	"

FOREIGN NAMES OF VEGETABLES AND HERBS

English	French	Italian	Polish	Spanish	Danish-Norwegian	German
Anise.....	Anis.....	Aniso, Anacio.....	Anyz.....	Anis, Matalahuga.....	Anis.....	Anis, Grüner Anis.....
Artichoke.....	Artichaut.....	Articcocca.....	Karczochy.....	Alcachofa.....	Artiskok.....	Artischoke.....
Asparagus.....	Asperge.....	Spargio.....	Spargagi.....	Esparago.....	Asparges.....	Spargel.....
Balm.....	Melisse citronelle.....	Melissa.....	Balsam.....	Toronjil, Citronella.....	Balsamurt.....	Citronen-Melisse.....
Basil.....	Basilic grand.....	Basilico.....	Bazylia.....	Albaca.....	Basilikum.....	Basilikum.....
Beans.....	Haricots.....	Fagioli.....	Fasola.....	Habichuela.....	Boenner.....	Bohnen.....
Beet.....	Betterave.....	Barbabietola.....	Buraki.....	Remolacha.....	Roedbede.....	Rübe.....
Borage.....	Bourache.....	Boragine.....	Boraz.....	Boraja.....	Borago.....	Boretsch.....
Broccoli.....	Chou Brocoli.....	Brocoli.....	Brokuly.....	Brocoli.....	Broccoli-Kaal.....	Spargelkohl.....
Brussels Sprouts.....	Chou de Bruxelles.....	Cavolo di Brusselles.....	Latorvil.....	Bretones de Bruselas.....	Rosenkaal.....	Rosenkohl.....
Cabbage.....	Chou pommé.....	Cavolo cappuccio.....	Kapusta.....	Col repello.....	Hovedkaal.....	Kopfkohl, Kraut.....
Cabbage, Savoy.....	Chou de Milan.....	Cavolo di Milano.....	Sabaudzka.....	Col de Milan.....	Savoikaal.....	Wirsing.....
Caraway.....	Cumin des prés.....	Carvi.....	Kminek.....	Comino.....	Karve.....	Feld-Kümmel.....
Carrot.....	Carotte.....	Carota.....	Marchew.....	Zanahoria.....	Gulerod.....	Carotten, Möhren.....
Cauliflower.....	Chou-fleur.....	Cavolflore.....	Kalafiori.....	Coliflor.....	Blomkaal.....	Blumenkohl.....
Celery.....	Céleri.....	Sedano.....	Selery.....	Apio.....	Selleri.....	Sellerie.....
Celeriac.....	Céleri-rave.....	Sedano-rapa.....	Selery (Korzen).....	Apio-nabo.....	Knopselleri.....	Knoll-Sellerie.....
Chervil.....	Cerfeuil.....	Cerfoglio.....	Czechrzyca.....	Perifollo.....	Kjoervel.....	Kerbel.....
Chicory.....	Chicorée sauvage.....	Cicoria selvatica.....	Cykorya.....	Achicoria.....	Cichorie.....	Cichorienwurzeln.....
Coriander.....	Coriandre.....	Coriandorlo.....	Koledra.....	Culantro.....	Koriander.....	Goriander.....
Corn Salad.....	Mâche.....	Valeriana.....	Ziarno Salaty.....	Canonigos.....	Vaarsalat.....	Feldsalat.....
Corn.....	Mais.....	Mais.....	Kukurydza.....	Maiz.....	Mais.....	Mais.....
Cress.....	Cresson alenois.....	Agretto.....	Rzerzucha.....	Mastuerzo.....	Karse.....	Garten-Kresse.....
Cress, Water.....	Cresson de fontaine.....	Nasturtio aquatico.....	Rzerzucha wodna.....	Berro.....	Broendkarse.....	Brunnenkresse.....
Cucumber.....	Comcombre.....	Cetriolo.....	Ogorek.....	Cohombro.....	Agurk.....	Gurken.....
Dandelion.....	Pissenlit.....	Dente di leone.....	Papawa.....	Diente de leon.....	Loevetand.....	Löwenzahn.....
Dill.....	Aneth.....	Aneto.....	Koper.....	Eneldo.....	Dil.....	Dill.....
Egg Plant.....	Aubergine.....	Petronciano.....	Gruszka milosna.....	Berengena.....	Aegplante.....	Eierplanze.....
Endive, Curled.....	Chicorée Endive.....	Endivia.....	Endywia.....	Endivia.....	Endivie.....	Endivien.....
Endive.....	Chicorée-Scarole.....	Endivia Scariola.....	.....	Escarolo.....	.....	Escarol.....
Broad Leaf.....	Ronde.....	.....	.....	.....	.....	.....
Fennel.....	Fenouil.....	Finocchio.....	Koper.....	Hinojo.....	Fennikel.....	Fenchel.....
Garlic.....	Ail.....	Aglio.....	Czosnek.....	Ajo.....	Hvidloeg.....	Knoblauch.....
Horehound.....	Marrube blanc.....	Marrubio.....	Marubium.....	Marrubio.....	.....	Andorn.....

FOREIGN NAMES OF VEGETABLES AND HERBS—Continued

English	French	Italian	Polish	Spanish	Danish-Norwegian	German
Horse Radish.....	Raifort sauvage.....	Rafano.....	Chrzan.....	Taramago.....	Peberrod.....	Meer Rettig.....
Hysop.....	Hysopce.....	Issopo.....	Hyzop.....	Hisopo.....	Isop.....	Isop.....
Kale.....	Chou vert.....	Cavolo verde.....	Solanka.....	Breton, Berza.....	Groenkaal.....	Blätterkohl.....
Kohl Rabi.....	Chou-rave.....	Cavolo rapa.....	Kalarepa.....	Col rabano.....	Kaalrabi.....	Knollkohl.....
Lavender.....	Lavende.....	Lavanda.....	Lawenda.....	Espiego.....	Lavendel.....	Lavendel.....
Leek.....	Poireau.....	Porro.....	Pory.....	Puerto.....	Purre.....	Porree, Lauch.....
Lettuce.....	Laitue.....	Lattuga.....	Salata.....	Lechuga.....	Salat.....	Lattich, Kopfsalat.....
Marjoram.....	Marjolaine.....	Magiorana.....	Majoranek.....	Mejorana.....	Merian.....	Majoran.....
Melon.....	Melon.....	Popone.....	Melon.....	Melon.....	Melon.....	Melone.....
Melon, Water.....	Melon d'eau.....	Melone d'acqua.....	Melon, wodny.....	Sandia.....	Vandmelon.....	Wasser-Melone.....
Mushroom.....	Champignon.....	Fungo pratajolo.....	Grzyb.....	Seta.....	Champignon.....	Schwamm.....
Nasturtium.....	Capucine.....	Nasturzio.....	Nsturcya.....	Capuchina.....	Blomkarse.....	Kapuciner Kresse.....
Okra.....	Gombaud.....	Ocra.....	Gombad.....	Combo.....	Hibiskus.....	Ocher.....
Onion.....	Ognon.....	Cipollo.....	Cebula.....	Cebolla.....	Roeðloeg.....	Zwiebel.....
Parsley.....	Persil.....	Prezemolo.....	Pietruszka.....	Perejil.....	Persille.....	Petersilie.....
Parsnip.....	Panaus.....	Pastinaca.....	Pasternak.....	Chirivia.....	Pastinak.....	Pastinake.....
Peas.....	Pois.....	Pisello.....	Groch.....	Guisante.....	Erter.....	Erbsen.....
Pepper.....	Piment.....	Peperone.....	Pieprz.....	Pimiento.....	Spansk Peber.....	Pfeffer.....
Pumpkin.....	Potiron.....	Zucca.....	Bania.....	Calabaza totanera.....	Gaeskar.....	Melonen-Kürbiss.....
Radish.....	Radis.....	Ravanello.....	Rzodkiew.....	Rabanito.....	Reddik.....	Radies.....
Rhubarb.....	Rhubarbe.....	Rabarbaro.....	Rubarbarum.....	Ruibarbo.....	Rhabarber.....	Rhabarber.....
Rosemary.....	Romarin.....	Rosmarino.....	Rozmaryn.....	Romero.....	Rosmarin.....	Rosmarin.....
Rue.....	Rue.....	Rue.....	Ruta.....	Ruda.....	Rude.....	Raute.....
Ruta Baga.....	Chou-navet.....	Cavolo navone.....	Ruta.....	Col nabo, Nabicol.....	Roe.....	Kohlribe, Wrucken.....
Saffron.....	Safran.....	Zafferano.....	Szafran.....	Azafran.....	Safran.....	Safran.....
Sage.....	Sauge.....	Salvia.....	Szawlija.....	Salvia.....	Salvie.....	Salbei.....
Salsify.....	Salsifis.....	Sassifra.....	Jarzy, Ostryga.....	Salsifi blanco.....	Flavrerod.....	Haferwurzel.....
Sorrel.....	Oseille.....	Acetosa.....	Szczaw.....	Acedera.....	Syre.....	Sauerampfer.....
Summer Savory.....	Sarriette annuelle.....	Santoreggia.....	Caber ogrodowy.....	Ajedrea comun.....	Sar.....	Bohnenkraut.....
Spinach.....	Epinaud.....	Spinace.....	Szpinaak.....	Espinaca.....	Spinat.....	Spinat.....
Squash.....	Courge.....	Zucca.....	Miekurz.....	Calabaza.....	Squash-graeskar.....	Kiurbiss.....
Swiss Chard.....	Poirée.....	Bieta.....	Bieda.....	Bleda.....	Blad bede.....	Beiskohl.....
Thyme.....	Thym.....	Timo.....	Macierzanka.....	Tomillo.....	Timian.....	Thymian.....
Tomato.....	Pomme d'Amour.....	Pomo d'oro.....	Pomidor.....	Tomate.....	Tomat.....	Liebesapfel.....
Turnip.....	Navet.....	Navone.....	Rzepa, brukiew.....	Nabo.....	Turnips.....	Weisse-Rübe.....
Wormwood.....	Absinthe.....	Assenzio.....	Piotun.....	Ajenjo.....	Malurt.....	Wermuth.....

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